REPLACING EXECUTIVE EQUITY COMPENSATION: THE CASE FOR CASH FOR LONG-TERM PERFORMANCE

NITZAN SHILON*

ABSTRACT

I argue that executive equity pay in U.S. public firms is undesirable and should be replaced with cash awards for attaining long-term performance criteria.

Paying top executives in equity (stock and stock options) is the most significant reform of executive compensation in our generation, universally welcomed not only by firms but also by academics, investors, and policy makers. Yet I argue that equity compensation is undesirable. It provides perverse incentives for managers to destroy shareholder value and behave manipulatively and recklessly. It is also economically wasteful, and its wastefulness, which is exacerbated by agency costs and cognitive biases, significantly contributes to the immense explosion of executive compensation.

Instead, I suggest a radical proposal: to replace such equity pay arrangements with carefully designed cash-for-performance schemes in which executives are rewarded in cash for attaining predetermined long-term performance measures. I further recommend that this reform be implemented systemically and that the tax and disclosure rules that are applied to cash incentive remuneration be placed on a level playing field with those that are applied to equity incentive pay. This reform is expected to eliminate the significant costs of equity compensation and make incentive pay more effective, transparent, cheap, and better tied to performance, while improving the limited incentive benefits generated by current equity compensation arrangements.

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We believe good . . . performance should be rewarded whether Berkshire stock rises, falls, or stays even. Similarly, we think average performance should earn no special rewards even if our stock should soar.

—Warren Buffett, letter to shareholders of Berkshire Hathaway, Inc., March 1986

INTRODUCTION

This Article reconsiders the way in which corporate executives in U.S. public firms are paid for long-term performance. For the past three decades, long-term compensation plans have paid executives in equity (stocks and stock options). My analysis indicates, however, that equity compensation is undesirable as an incentive vehicle and is responsible for the dramatic increase in executive pay. Instead, I put forward a conceptually novel approach that would substitute equity pay with cash awards that would be granted to executives upon the achievement of predetermined, long-term performance criteria. Paying in cash for long-term performance, I argue, would improve the measurement of management performance and eliminate the perverse incentives that the ability to unload equity pay provides for managers to destroy shareholder value. Also, by significantly reducing the exorbitant costs that equity pay imposes on both managers and firms, the proposed reform would help boards decrease the extremely high amounts currently being paid to executives.[1]

The corporate governance scandals of the early 2000s and the financial crisis of 2008–2009 led to a widespread recognition that equity compensation arrangements provide corporate executives with incentives to destroy shareholder value and that the aggregate compensation payments that equity pay creates are so large as to mock the shareholder interests that such pay is intended to promote. Both academic and media studies have pointed out how executives and directors of many failing companies during that decade managed to enrich themselves by selling

[1] I refer to "managers" in Parts I and II because there I discuss theoretical considerations that apply to managers in general—directors and executives alike. I refer to "executives" when I discuss the explosion in executive compensation and when, further on, I suggest a reform in executive compensation. I focus on executive pay because executives are paid the highest amounts and because managerial agency problems arise from the way boards monitor, discipline, and motivate corporate executives. Reforming executive compensation, therefore, stands to touch at the heart of managerial agency costs more than reforming managers' pay in general.

their stock-based compensation shortly before their companies' stock prices plummeted.[2] Their reports have cast doubt on executive compensation's intended incentive efficiency and, as President Barack Obama emphasized, highlight its focus on narrow self-interest and short-term gain at the expense of everything else.[3] Leading government officials, such as Federal Reserve Chairman Ben Bernanke[4] and Treasury Secretary Timothy Geithner,[5] as well as high-ranking business moguls such as Goldman Sachs's CEO Lloyd Blankfein,[6] have all stressed their concern about the flawed incentives that equity compensation provides. Such concern resulted in strong language used against executive compensation when, in 2002, Bill McDonough, president of the Federal Reserve, referred to its skyrocketing levels as "morally dubious"[7] and, in 2009, President Obama called the situation "shameful."[8]

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[2] For example, the *Financial Times* conducted a survey in the summer of 2002 showing that the top executives and directors of the twenty-five largest U.S. corporations that had gone bankrupt since January 2001 had reaped about $3.3 billion by selling their stock holdings before the stock prices had plummeted. These executives have managed to be rewarded handsomely for failure and have built a personal fortune on the misfortune of their shareholders (see *Financial Times*, July 31, 2002). Bebchuk, Cohen, and Spamann reported that the top five executive teams of Bear Stearns and Lehman Brothers cashed out large amounts of stock during the years that led to the credit crisis of 2008–2009. *See* Lucian A. Bebchuk et al., *The Wages of Failure: Executive Compensation at Bear Stearns and Lehman 2000–2008*, 27 YALE J. ON REG. 257, 260 (2010).

[3] *See President Obama's Remarks on Executive Pay,* N.Y. TIMES, (Feb. 4, 2009), https://www.nytimes.com/2009/02/04/us/politics/04text-obama.html.

[4] *See* Ben S. Bernanke, Chairman, Bd. of Governors of the Fed. Reserve Sys., Speech at the Independent Community Bankers of America's National Convention and Techworld (Mar. 20, 2009), *transcript avail-able at* http://www.federalreserve.gov/newsevents/speech/bernanke20090320a.htm ("[S]upervisors must pay close attention to compensation practices that can create mismatches between the rewards and risks borne by institutions or their managers. . . . [P]oorly designed compensation policies can create perverse incentives that can ultimately jeopardize the health of the banking organization.").

[5] *See* Press Release, U.S. Dep't of the Treasury, Statement by Treasury Secretary Tim Geithner on Compensation (June 10, 2009), http://www.ustreas.gov/press/ releases/tg163.htm (emphasizing the need to better align compensation practices with sound risk management and long-term growth by ensuring they properly measure and reward performance).

[6] *See* Lloyd Blankfein, *Do Not Destroy the Essential Catalyst of Risk*, FIN. TIMES (Feb. 9, 2009) ("An individual's performance should be evaluated over time so as to avoid excessive risk-taking. To ensure this, all equity awards need to be subject to future delivery and/or deferred exercise. Senior executive officers should be required to retain most of the equity they receive at least until they retire, while equity delivery schedules should continue to apply after the individual has left the firm.").

[7] BRIAN COYLE, CORPORATE GOVERNANCE 123 (5th ed. 2015).

[8] *See President Obama's Remarks*, *supra* note 3.

As I explain in Part I, the extensive use of equity pay for corporate managers reflects the classical view of equity compensation: that paying managers in stock and stock options can make them think more like stockowners, thus greatly aligning their incentives with the interests of shareholders. It also maintains that equity pay efficiently trades off risk sharing and incentive considerations, and that it incorporates performance information that cannot be extracted from the firm's accounting data.[9] Furthermore, it contends that equity pay aims not only to help attract and retain talent but also to optimize managers' risk appetite. In support of this view, a series of empirical studies shows that executives who hold more stock are significantly better stewards for their shareholders.[10] The classical view, which has profound implications for managers' compensation, is often taken for granted. However, presuming that paying managers in equity will make them think like stockowners is far from reality.

My analysis in Part II indicates that, contrary to what the classical view holds, paying managers in equity is undesirable. For starters, change in stock price is a biased estimator of management performance. First, for most firms, stock price movement is generally not due to managers' actions but instead reflects market- and industry-wide trends. In this sense, equity pay does not so much reflect "pay for performance" as it does "pay for pulse." Second, because of market inefficiencies, stock prices can deviate from fundamental values for prolonged periods of time and are especially poor reflections of managerial actions with long-term horizons. Third, managers may be able to manipulate stock price by managing direct earnings, misreporting results, suppressing bad news, making misleading public statements, conducting stock buybacks, or performing other acts of "window dressing."

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[9] *See e.g.,* James Mirrlees, *The Theory of Moral Hazard and Unobservable Behaviour: Part I,* 66 REV. ECON. STUD. 3 (1999); Bengt Holmstrom, *Moral Hazard and Observability,* 10 BELL J. ECON. 74 (1979); Bengt Holmstrom & Jean Tirole, *Market Liquidity and Performance Monitoring*, 101 J. POL. ECON. 678 (1993).

[10] *See, e.g.*, Ulf Von Lilienfeld-Toal & Stefan Ruenzi, *CEO Ownership, Stock Market Performance, and Managerial Discretion,* 69 J. FIN. 1013 (2014) (reporting that CEOs with high stock ownership outperform those with low stock ownership by 4%–10% per year). *See also* Randall Morck et al., *Management Ownership and Market Valuation*, 20 J. FIN. ECON. 293 (1988) (reporting that "Tobin's Q first increases, then declines [when ownership becomes concentrated], and finally rises slightly as ownership by the board of directors rises"); Robert Tumarkin, *How Much Do CEO Incentives Matter?*, (July 11, 2010) (unpublished manuscript) (available at http://people.stern.nyu.edu/rtumarki/research/HMDCIM.pdf) ("For the mean incentive level, Tobin's q increases by 10.0% compared to that of counterfactual firms that lack CEO incentive compensation.").

Indeed, public firms and investors no longer rely on stock price to fairly estimate managers' performance. In the wake of the 2008 financial crisis and the Dodd-Frank legislation, investors and proxy advisors have used their right to an advisory vote on executive compensation—better known as "say on pay"—to pressure firms into reforming equity compensation. Their most significant achievement, albeit one that is largely overlooked, is pushing firms to shift away from delivering most of their equity compensation in the form of time-based awards (which depend only on the manager's continued employment) in favor of performance-based equity.[11] Contrary to the classical view, performance-based plans never use the absolute change in stock price to measure the manager's performance. Instead, they use other financial, market, accounting, operational, and nonfinancial criteria.

Part II argues not only that change in stock price is not a good estimator for gauging management performance but also that equity compensation—owing to managers' freedom to hedge or sell it—provides managers with perverse incentives to destroy firm value. Those who expect to unload their shares are motivated to sacrifice long-term value for short-term gain, take excessive risks, reject value-increasing risky projects, manipulate stock price, and trade on inside information. Stock ownership policies, which were universally adopted by public firms following the 2008 financial crisis, appeared extremely ineffectual in limiting managers' freedom to unload their equity awards.[12]

Prominent academics have acknowledged these perverse incentives and hence have proposed schemes for optimal unloading restrictions.[13] Importantly, however, because of the inherent flaws of equity as a form of pay, it is unlikely that such restrictions could actually be designed without incurring prohibitively high costs. Because of the typically large equity

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[11] *See* EQUILAR, INC., 2016 CEO PAY TRENDS 15 (June 2016), http://www.meridiancp.com/wp-content/uploads/Equilar-CEO-Pay-Trends-Report.pdf [hereinafter EQUILAR, INC., 2016] (explaining that "Say on Pay" brought the shift from time-based to performance-based equity); EQUILAR, INC., 2017 CEO PAY TRENDS 20, 22 (2017) [hereinafter EQUILAR, INC., 2017] (on file with author) (reporting that Performance-based equity was awarded in 2016 to 81.5% of S&P 500 CEOs and made, on average, 55% of their equity pay mix).

[12] *See* Nitzan Shilon, *CEO Stock Ownership Policies—Rhetoric and Reality,* 90 IND. L.J. 353, 353–58 (2015).

[13] *See, e.g.,* Lucian Bebchuk & Jesse Fried, *Paying for Long-Term Performance,* 158 U. PENN. L. REV. 1915, 1958 (2010); Sanjai Bhagat & Roberta Romano, *Reforming Executive Compensation: Focusing and Committing to the Long-Term,* 26 YALE J. REG. 359 (2009).

amounts that executives are paid and accumulate over time,[14] as well as executives' psychological tendency to discount for time significantly more heavily than economic theory predicts,[15] unwinding restrictions should be extremely strict in order to be effective. Meaningful unloading restrictions are expected to significantly elevate equity pay's liquidity, risk-taking, and diversification costs, which would motivate boards to increase executive compensation even further. Moreover, they would significantly remove equity pay's tangible rewards from the managerial line of sight, thereby weakening managers' incentives to maximize firm value.

The third issue that Part II takes with stock-based vehicles is that equity pay's inherent economic inefficiencies and the psychological bias that it triggers propel an explosion in executive compensation amounts. Equity pay's inherent economic wastefulness is caused both by the transfer of firm-specific risk from well-diversified, risk-neutral public shareholders to risk-averse, under-diversified executives and by the imposition of liquidity costs on executives. The psychological bias is introduced when firms underestimate the cost of equity and then pay their executives in that same currency, which the executives do not value, either. Moreover, equity pay creates an opportunity for executives to increase their agency costs and push boards to pay them in equity *in addition to,* rather than *in return for,* other pay components. Equity pay costs are so high that, since it was introduced in the early 1980s, CEO compensation rose almost tenfold, doubling the growth in the stock market and making the gap between CEO pay and that of the average worker ten times larger. The implementation of "say on pay" in 2011, which introduced nascent pressures on executive pay practices, failed to curb executive compensation amounts.

To solve the problems involved with using change in stock price as a performance measure, firms have aggressively shifted from time-based to performance-based equity plans. To alleviate the perverse incentives arising from managers' ability to unload their equity pay, academics propose optimal unloading restriction schemes. However, I suggest in Part III that both issues—as well as the inflated amounts that executives currently receive as compensation—could be addressed by replacing equity compensation with cash awards paid to executives for attaining long-term performance criteria. To this end I outline two variants: (1) a

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[14] A 2013 study found that CEOs in S&P 500 firms hold, on average, almost $15 million worth of their stock compensation. *See* Shilon, *supra* note 12 at 357 n.14.

[15] *See, e.g.,* Ted O'Donoghue & Matthew Rabin, *Doing It Now or Later,* 89 AM. ECON. REV. 103, 105–106 (1999).

"Predetermined Cash Amount", which uses fixed cash amounts that executives would pocket for attaining certain performance criteria, or (2) a "Performance Phantom Shares" approach, which entitles executives who hit their performance targets to the grant-date cash value of fixed stock amounts.

By saving the risk-bearing, liquidity, and diversification costs inherent in equity pay and instead paying executives in cash, which they value significantly more, the proposed cash-for-performance plans would assist boards in negotiating reduced executive compensation amounts. By avoiding the grant of gigantic amounts of unloadable equity, these plans would obviate the perverse incentives inherent in equity pay. And by measuring performance using deliberate long-term performance measures, the plans would not only improve measurement accuracy and pay effectiveness but also enhance pay transparency and pay-performance sensitivity.

Because the proposed arrangement would significantly change the lion's share of executive compensation, adjustments to other pay components should be considered as well. While a full account of such potential modifications is left for future research, Part III delineates a framework for adjusting time-based equity plans and clawbacks.

Part III concludes with my statistical analysis of quantitative and qualitative data disclosed in public filings of firms included in the S&P 100 index, showing that eighteen of the one hundred most prominent U.S. firms already reward their executives for long-term performance in cash. Unfortunately, my analysis reveals that their plans are generally designed in ways that benefit executives at the expense of shareholders. My proposed reform instead offers a trade: reduced executive pay for an improved form of pay and improved executive incentives. To avoid the flaws present in current long-term cash incentive schemes, plans that would facilitate my reform must be designed and promoted systemically by institutional investors and their influential proxy advisory firms. In addition, to enable firms to evaluate the proposed arrangement fairly, cash remuneration should be placed on a level playing field with equity, and distortions created by tax and disclosure rules should be eliminated.

Part IV examines potential objections to paying cash for long-term performance. I address claims that substituting equity for cash would make some firms cash constrained, and that the proposed arrangement

might weaken executives' incentives. I also consider Panglossian claims that firms would already have adopted cash-for-performance arrangements if such arrangements were in fact desirable. After reviewing all these arguments, I conclude that they do not provide a good basis for maintaining wasteful and perverse incentivized equity plans.

I. OBJECTIVES OF EQUITY COMPENSATION

Equity compensation for managers is intended to attain three objectives. First, by tying pay directly to the change in a firm's stock price, it is expected to align the interests of managers with those of shareholders so that agency problems between those parties are mitigated and senior managers are encouraged to maximize their efforts and give high performance. Second, by promising a growing stock ownership over time, it is designed to attract and retain quality managers. Third, by granting a certain mix of equity instruments, each having a different sensitivity to risk, it is aimed at optimizing managers' risk appetite.

A. Aligning Managers' Interests with Those of Shareholders

In most large American corporations, ownership is separate from control in the sense that manager-agents own little stock in the firms they run.[16] Because shareholder-principals are too dispersed to force managers to maximize firm value, agency costs are created and corporate assets may be abused to benefit managers at the expense of shareholders. Such agency costs may be triggered by managers diverting corporate resources to themselves, taking perquisites, and exerting too little effort ("shirking"). These costs may also be triggered by managerial pursuit of non-value-maximizing objectives, such as excessive acquisitions ("empire building"), excessive sales growth, and the primacy of employee interests over shareholder interests. When their time horizons differ from those of long-term shareholders,[17] managers may take excessive risks and pursue short-term gains.

Managerial agency costs can be significantly reduced if appropriate incentives for managers are established so as to limit divergences from

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[16] *See* ADOLF A. BERLE, JR. & GARDINER C. MEANS, THE MODERN CORPORATION AND PRIVATE PROPERTY 119–25 (1932).

[17] This may happen because of managers' career concerns or ability to trade on inside information.

shareholder interests. In theory, equity compensation will accomplish this by increasing managers' stakes in the firms they control, causing them to pay a larger share of the costs associated with their non-value-maximizing acts, and making them less likely to squander corporate wealth and more likely to take actions that increase firm value.[18] In support of this theory, a series of empirical studies indicates that executives who hold more stock are significantly better stewards for shareholders, both in maximizing shareholder value and in generating higher operating income.[19] Moreover, investors welcome managerial equity ownership. For example, in 2008, Warren Buffett conditioned his sizable Goldman Sachs and GE investments on those companies' executives committing to hold at least 90% of their stock compensation for three years or until the termination of Buffett's investment, whichever came first.[20]

B. Attracting and Retaining Talent

Equity compensation for managers is designed to reap retention and recruitment benefits. Retention benefits are provided through vesting schedules that condition the transfer of ownership in equity grants from the company to the manager upon the manager staying with the company for several years.[21] For example, when managers are granted three hundred shares with a three-year vesting schedule, they will typically own one hundred shares if they stay with the company for at least one year, another hundred shares if they stay in office for at least two years, and the remaining hundred shares only if they remain with the company for at least three years.

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[18] *See* Michael C. Jensen & William H. Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure,* 3 J. FIN. ECON. 305, 308 (1976) (explaining that the principal can limit the aberrant activities of her agent by providing her with appropriate incentives).

[19] *See* Lilienfeld-Toal & Ruenzi, *supra* note 10; Morck et al., *supra* note 10; Tumarkin, *supra* note 10.

[20] *See* The Goldman Sachs Grp., Inc., Proxy Statement (Form DEF 14A) 16 (Apr. 6, 2009), *available at* http://www.goldmansachs.com/investor-relations/financials/archived/proxy-statements/docs/Proxy-for-2009-meeting.pdf.

[21] *See* Brian D. Cadman et al., *Stock Option Grant Vesting Terms: Economic and Financial Reporting Determinants,* 18 REV. ACCT. STUD. 1159, 1159 (2013). Vesting periods in the United States are usually three to five years for executives. *See* Brian J. Hall & Jeffrey B. Liebman, *The Taxation of Executive Compensation,* 14 TAX POL'Y & ECON. 1, 7 (2000). Typically, the executive earns the prorated amount of his equity grant each year. *See Equity Vesting Schedules for S&P 1500 CEOs,* EQUILAR, INC. (Apr. 26, 2013), http://www.equilar.com/reports/3-equity-vesting-schedules.html.

Recruitment benefits are provided in three distinct ways. First, troubled companies will be able to lure in the best and the brightest without burdening their cash flow. Second, highly motivated and entrepreneurial top managers can credibly signal their belief that they can increase the company stock price by accepting a signing bonus in the form of equity.[22] Third, a new manager's acceptance of the equity promise would immediately align his interests with those of the shareholders, eliminating the need to wait for a few years until his stock holdings accumulate.

C. Optimizing Managers' Risk Appetite

An important rationale for equity compensation (and especially option compensation) is that it encourages risk-averse managers to take those risks that are necessary and appropriate, in line with the preference of their typically risk-neutral diversified shareholders. Senior managers are more risk-averse than diversified shareholders because they are disproportionately invested in the firm through career concerns of reputation and success. They are also exposed to organization-specific human capital and undiversified wealth portfolios.[23] Conversely, public shareholders typically hold diversified portfolios, which allow them to eliminate firm-specific risk.[24]

The theory is that equity compensation induces more risk taking because risky projects are generally associated with higher returns and therefore increase the expected value of incentive compensation.[25] This can alleviate a manager's risk aversion as well as his desire to diversify his stock portfolio in order to eliminate exposure to firm-specific risk.[26]

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[22] *See* Brian J. Hall & Kevin J Murphy, *The Trouble with Stock Options,* 17 J. ECON. PERS. 49, 56–57 (2003).

[23] *See* Yakov Amihud & Baruch Lev, *Risk Reduction as a Managerial Motive for Conglomerate Mergers,* 12 BELL J. ECON. 605, 606 (1981); Clifford Smith & Rene Stulz, *The Determinants of Firms' Hedging Policies,* 20 J. FIN. & QUANT. ANAL. 391, 391 (1985); Peter Tufano, *Who Manages Risk? An Empirical Examination of Risk Management Practices in the Gold Mining Industry,* 51 J. FIN. 1097, 1109 (1996).

[24] *See generally* William F. Sharpe, *Capital Asset Prices: A Theory of Market Equilibrium under Conditions of Risk,* 19 J. FIN. 425 (1964).

[25] Consistent with this prediction, a series of empirical studies found a positive relationship between performance incentives and firm risk. *See, e.g.,* Jeffrey Coles et al., *Managerial Incentives and Risk-Taking,* 79 J. FIN. ECON. 431 (2006); Christopher Armstrong & Rahul Vashishtha, *Executive Stock Options, Differential Risk-Taking Incentives, and Firm Value,* J. FIN. ECON. 104 (2012); Andreas Milidonis & Konstantinos Stathopoulos, *Managerial Incentives, Risk Aversion and Debt*, J. FIN. & QUANT. ANAL. 1 (2014).

[26] Wayne R. Guay, *The Sensitivity of CEO Wealth to Equity Risk: An Analysis of the Magnitude and Determinants,* 53 J. FIN. ECON. 45, 47 (1999) (discussing control risk-related incentive issues).

Encouraging more risk taking is especially effective when the manager receives stock option grants. The value of a stock option, unlike that of stock, increases with stock price volatility, creating a direct incentive for the manager to increase the firm's operational risk.[27]

II. THE TROUBLE WITH EQUITY COMPENSATION

Despite the goals that equity compensation is intended to attain, the relationship between equity incentives and performance is terribly weak. Moreover, equity pay provides managers with perverse incentives to destroy firm value and to behave manipulatively and recklessly. It is also a terribly costly compensation vehicle, significantly contributing to the immense explosion in executive pay. And all these problems are further exacerbated by agency costs.

A. Weak or No Relation between Equity Grants Value and Performance

Equity compensation does not meet investor expectations that it will align managers' incentives with their own. For starters, equity pay is ineffective in motivating managers because its value vis-à-vis their productivity is weak. There are two reasons for this. First, the change in stock price is an inadequate gauge of management productivity. Second, things become worse when firms allow managers to undo the incentive

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[27] *See* Zhiyong Dong et al., *Do Executive Stock Options Induce Excessive Risk Taking?,* 34 J. BANK. & FIN. 2518, 3–16 (2010) (discussing whether executive stock options can induce excessive risk taking by managers in firms' security issue decisions); Randolph B. Cohen et al., *Do Executive Stock Options Encourage Risk-Taking?* 1–2 (Mar. 2000) (unpublished manuscript), *available at* http://www.people.hbs.edu/lviceira/cohallvic3.pdf; Jensen & Meckling, *supra* note 18, at 305; Stewart Myers, *Determinants of Corporate Borrowing,* 5 J. FIN. ECON. 147 (1977); Stewart Myers, *Determinants of Corporate Borrowing,* 5 J. FIN. ECON. 147, 155–65 (1977) (discussing corporate borrowing in finance theory on the issue of corporate debt policy); Clifford Smith & Ross Watts, *The Investment Opportunity Set and Corporate Financing, Dividend and Compensation Policy,* 3 J. FIN. ECON. 263, 269–91(1992) (examining explanation for corporate financing dividend and compensation-policy choices); Jennifer Gaver & Kenneth Gaver, *Additional Evidence on the Association between the Investment Opportunity Set and Corporate Financing, Dividend, and Compensation Policies,* 16 J. ACC. & ECON. 125, 127–28 (1993)(discussing evidence on the relation between investment opportunity set and financing); John Bizjak et al., *Stock-Based Incentive Compensation and Investment Behavior,* 16 J. ACC. & ECON. 349, 351–52 (1993) (discussing concern over current stock prices and investment decisions); Guay, *supra* note 26, at 44–52; John Core & Wayne Guay, *The Use of Equity Grants to Manage Optimal Equity Incentive Levels,* 28 J. ACC. & ECON. 151, 15–34 (1999) (discussing how firms use annual grants of options and restricted stock to CEOs to manage the optimal level of equity incentives); Coles et al., *supra* note 25, at 432–34.

effects of their equity grants by freely unloading those grants and by entering into hedging and derivative transactions, which is quite common.

1. Weak Relation between Equity Price and Performance

A fundamental reason why firms use equity incentives is to directly link managers' compensation to their contribution to firm value, thereby motivating them to maximize their efforts and the quality of their decision making. Unfortunately, because the board of directors cannot directly observe the manager's contribution to firm value, it needs to use a proxy for gauging it. Sadly, change in the value of the company's stock, which is the measure taken by equity compensation, is an extremely poor proxy for estimating the manager's contribution.

Paying in stock and stock options rewards managers for significant market- and industry-wide movements that have no association with their performance.[28] A Harvard study reports that only 30% of a firm's stock price movement is driven by firm-specific factors; industry and market factors are responsible for the remaining 70%.[29] And only part of the 30% firm-specific component can be attributed to the current manager's contribution. Some of it is due to the contributions of other current and past employees as well as to the former managers; some is due to constraints imposed on the manager by activist shareholders or by regulations; and some is simply a matter of luck.

Because equity compensation has little to do with firm performance, critics have long mocked it for being a "pay for pulse."[30] In recent years, firms responded to this concern by moving away from time-based to performance-based equity plans. Specifically, while only one-third of equity awards granted to S&P 500 CEOs in 2011 were conditioned on meeting performance criteria, 55% of such awards were performance-based in 2016.[31] The idea was that while time-based awards fully link the executive's grant value to stock price, performance-based awards

[28] *See* Lucian Bebchuk & Jesse Fried, *Pay without Performance: Overview of the Issues,* 17 J. APP. COR. FIN. 8, 9–23 (2005) (discussing a full account of how managerial power and influence have shaped executive compensation in publicly traded U.S. Companies).

[29] *See* LUCIAN BEBCHUK & JESSE FRIED, PAY WITHOUT PERFORMANCE: THE UNFULFILLED PROMISE OF EXECUTIVE COMPENSATION 179 (Harvard University Press, 2004).

[30] *See e.g.,* Sudhakar V. Balachandran, *Paying for a Pulse*, FORBES.COM (Oct. 15, 2008), https://www.forbes.com/2008/10/15/compensation-ceo-bailout-oped-cx_svb_1015balachandran.html#110 90ea34b61; Joann S. Lublin, *Boards Tie CEO Pay More Tightly to Performance; Options Grants May Depend on Meeting Financial Goals; Moving beyond a "Pulse,"* WALL ST. J. (Feb. 21, 2006), at A1.

[31] *See* EQUILAR, INC., 2017 *supra* note 11, at 4.

determine the amount of equity grants by linking it to the achievement of certain firm-specific performance criteria. This reform, however, does not fully resolve the issue of pay for pulse. After performance-based awards are granted, their value is still fully linked to stock price. Firms have walked only halfway across the path in making incentive pay firm-specific.

2. Nullifying Equity Incentives through Unloading and Hedging Transactions

By allowing managers to unload their equity grants once they vest,[32] equity plans permit them to nullify their incentives. Corporate managers might do so in order to reduce their significant liquidity, risk-bearing, and diversification costs. Indeed, a 2013 study reports that most top executives take full advantage of their freedom to unload their firms' stock and engage in massive stock selling.[33] Such sales can render managers' incentives sub-optimally low, especially because boards replenish only 7% of incentives after sales.[34]

By hedging their equity pay through short sales or derivative transactions, managers offset potential losses or gains that may be incurred by holding on to their equity grants.[35] Furthermore, the ability to enter into hedging transactions may create opportunities for managers to gain from stock manipulation.[36] While the Dodd-Frank Act requires firms to disclose their policies regarding employee hedging,[37] it does not prohibit

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[32] *See* Shilon, *supra* note 12, at 367, 400 (reporting that stock ownership policies are extremely ineffectual in making CEOs hold on to their firms' stock, generally functioning in a way that allows CEOs to immediately unload virtually all the stock they own).

[33] *See* Tomislav Ladika, *Do Firms Replenish Executives' Incentives after Equity Sales?,* 4, 5, 21 (Sept. 8, 2013) (unpublished manuscript), *available at* https://www.lebow.drexel.edu/sites/default/files/event/LADIKA_DoFirmsReplenishIncentives_0.pdf (reporting that 61% of top executives in S&P 1500 firms sell firm equity at least once during their tenure, with the median sale equal to 15% of the executive's total holdings in the firm).

[34] *Id.*

[35] *See generally* David Schizer, *Executives and Hedging: The Fragile Legal Foundation of Incentive Compatibility,* 100 COLUM. L. REV. 440, 23 (2000) (discussing how tax law helps avert this consequence in the United States).

[36] This might happen, for example, by entering into a forward contract in tandem with increasing short-term profits at the expense of instilling latent risks.

[37] Dodd–Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 955, 124 Stat. 1376, 1904 (2010) (codified at 15 U.S.C. 78n (2010)).

this practice. In fact, Bettis, Bizjak, and Kalpathy found that many CEOs routinely hedge a portion of their equity grants.[38]

B. Value-Destroying Incentives

Unfortunately, the ability of corporate managers to sell their equity compensation not only reduces their motivation to enhance firm value but also can provide incentives for them to act in ways that would destroy firm value. They might be incentivized, for example, to sacrifice long-term value for the short term, take excessive risks, reject value-increasing risky projects, manipulate stock price, and trade on inside information. In addition, equity pay encourages managers to take actions that might harm non-shareholder stakeholders and undercut managers' intrinsic motivation.

1. Myopic Incentives

The ability to unload equity grants motivates managers to make distorted investment decisions[39] that would boost their firms' stock price in the short term even if those decisions would certainly destroy value in the long term. Consider managers whose shares are currently worth $100 and, in the long term, are expected to appreciate to $150. If they can take actions that would increase the current value of their stock to $110 but would significantly reduce the long-term value of those shares to say, $120, they might do so if they can sell a significant amount of their stock in the present. Such a value-destroying incentive would be especially high if the amount of equity they expect to receive in the future is small compared to their current holdings and when their time value of money is high.

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[38] *See* Carr Bettis et al., *Why Do Insiders Hedge Their Ownership? An Empirical Examination,* 44 FIN. MNG. 655, 679 (2015) (examining different types of derivative instruments used by corporate insider).

[39] *See* Simi Kedia & Thomas Philippon, *The Economics of Fraudulent Accounting,* 22 REV. FIN. STUD. 2169, 2195 (2009) (reporting evidence that firms that engage in fraudulent accounting to boost a short-term price also hire and invest too much, distorting the allocation of real sources); Christopher Polk & Paola Sapienza, *The Stock Market and Corporate Investment: A Test of Catering Theory,* 22 REV. FIN. STUD. 187, 212–13 (2009) (finding that managers with short-term horizons engage in high abnormal investments and subsequently realize low stock returns, a phenomenon that is more severe in firms with higher research and development intensity or share turnover).

Academics have long called corporate America's fixation on meeting analysts' quarterly earning estimates "the tyranny of quarterly earnings."[40] In 2016, presidential candidate Hillary Clinton pledged to change America's obsession with "quarterly capitalism," which hinders innovation and corporate investments.[41] By encouraging managers to sacrifice long-term for short-term value, equity pay exacerbates what is deemed to be the biggest failure of American corporate governance.[42]

2. Incentives to Take Excessive Risks

Because managers who may sell their equity grants can profit from stock price volatility, they are motivated to pursue undue levels of risk. This happens because the greater the riskiness of the firm's operations, the greater the stock price fluctuations, which thereby creates a financial opportunity for managers. In particular, it allows them to capitalize on greater probability for stock price appreciation, whereas their access to inside information and ability to unload their stock before its value tanks protects them from the increased downside risk.[43]

For example, consider a transaction that would boost a firm's stock price from $40 to $60 if it succeeds, but would tank the price from $40 to $20 if it fails. There is a 50% probability of either success or failure. Such a transaction significantly elevates the firm's risk but does not create any value for shareholders. Unfortunately, equity-paid managers might be motivated to pursue this project, pocket the profits if the project succeeds, and take advantage of their inside information to sell their stock compensation before the price drops if the project appears likely to fail.[44]

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[40] *See, e.g.,* Michael Porter, *Capital Disadvantage: America's Failing Capital Investment System,* 70 HAR. BUS. REV. 65 (1992) (discussing the nation's businesses and how to innovate and upgrade their competitive advantages).

[41] *See* Myles Udland, *Hillary: Corporate America Is Obsessed with "Quarterly Capitalism"—Here's How I'd Change That,* BUS. INSIDER (Apr. 1, 2016), http://www.businessinsider.com/hillary-clinton-quarterly-capitalism-2016-4 [https://perma.cc/73K8-AVFT].

[42] *See* Guhan Subramanian, *Corporate Governance 2.0,* HARV. BUS. REV. 98 (2015) (discussing managers being consumed by unrelenting pressure to meet goals).

[43] Such protection from stock depreciation renders managers' stock akin to stock options. This is because stock option holders may fully gain from stock price appreciation but are entirely protected against any decrease in stock price. Stock option value increases with stock price volatility.

[44] *See generally* Tao Chen et al., *Holding On for Good Times: The Information Content of CEOs' Voluntary Equity Exposure* (Aug. 2012) (unpublished manuscript), *available at* http://moya.bus.miami.edu/~vchhaochharia/dokuwiki/lib/exe/fetch.php?media=ceo_equity_ex

In support of this view, a Harvard study suggests that incentives created by managerial freedom to unload large fractions of stock-based compensation encouraged the top five executives at Bear Stearns and Lehman Brothers to take excessive risks during the years preceding their firms' meltdowns.[45]

3. Incentives to Reject Value-Increasing Risky Projects

While the freedom to unload equity incentives may encourage managers to take excessive risks, holding on to their equity grants may encourage them to take a suboptimal level of risk. This would happen because managers, unlike their shareholders, are risk-averse and under-diversified,[46] and equity compensation provides them with additional undiversifiable firm-specific risk related to the firm stock price. Hence, it may lead them to turn down risky but value-enhancing projects.[47] In support of this theoretical concern, a body of empirical studies indicates that managers tend to engage in value-destroying conglomerate mergers.[48]

4. Incentives to Manipulate Stock Price

The freedom to unwind their equity grants motivates managers to manipulate stock price and thereby sell their equity grants for an artificially high price. They engage in such activity by conducting stock

posure_19aug2012.pdf (reporting that CEOs have private information about future stock price performance, which they generally use to choose their stock exposure levels to the firm).

[45] *See* Bebchuk et al., *supra* note 2, at 257, 274.

[46] *See infra* Section I.C.

[47] *See* Sugato Bhattacharyya & Jonathan B. Cohn, *The Temporal Structure of Equity Compensation* (unpublished manuscript) (Mar. 2010), *available at* https://papers.ssrn.com/sol3/papers.cfm?abstract_ id=1108765.

[48] *See, e.g.,* Amihud & Lev, *supra* note 23, at 605–10; Don May, *Do Managerial Motives Influence Firm Risk Reduction Strategies?,* 50 J. FIN. 1291, 1291–92 (1995) (discussing shareholders controlling individual portfolios).

buybacks,[49] engaging in direct earnings management,[50] misreporting,[51] suppressing bad news, and making misleading public statements or performing other acts of "window dressing."[52] A recent study empirically links such actions to managers' incentives to improve the conditions for their equity sales.[53] This problem is exacerbated when managers are

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[49] Such repurchases can inflate a company's share price in the short run, providing an opportunity for executives to sell their equity grants at manipulatively high prices. *See* Arne Alsin, *The Ugly Truth behind Stock Buybacks,* FORBES (Feb. 28, 2017), https://www.forbes.com/sites/aalsin/2017/02/28/shareholders-should-be-required-to-vote-on-stock-buybacks/.

[50] "Direct earnings management" is the strategic timing of investments, sales, expenditures, and financing decisions to influence short-term accounting results and the short-term stock price at the expense of long-term economic value. *See* François Degeorge et al., *Earnings Management to Exceed Thresholds,* 72 J. BUS., 1, 2–3 (1999). To manage reported earnings, for example, short-term managers increase the frequency of short-term, retail-level marketing actions (price discounts, feature advertisements, and aisle displays) at the expense of long-term brand equity investment (such as television advertisement) to influence the timing of consumers' purchases. *See* Craig J. Chapman & Thomas J. Steenburgh, *An Investigation of Earnings Management through Marketing Actions* (Harv. Bus. Sch., Working Paper No. 08-073, 2010), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=930738. Real earning management neither violates securities law nor is prohibited by corporate law. *See, e.g.*, Kamin v. Am. Express Co., 383 N.Y.S.2d 807, 811 (Sup. Ct. 1976) (ruling that directors are allowed to deliberately cause their firms to pay extra taxes so that the firms can report higher short-term earnings), *aff'd*, 387 N.Y.S.2d 993 (App. Div. 1976).

[51] "Misreporting" is the practice of "earnings manipulation involving merely the discretionary accounting of decisions and outcomes already realized." *See* Degeorge et al., *supra* note 50 at 1, 3. Earnings manipulation can be legal, so that it does not violate the U.S. Generally Accepted Accounting Principles, or illegal. From 1998 to 2004, for example, Fannie Mae illegally manipulated its quarterly earnings so that its executives could pocket higher bonuses. Reworking its accounting has cost Fannie Mae about $1 billion. *See* Marcy Gordon, *Wall St. Applauds Fannie Mae Restatement,* FOX NEWS (Dec. 7, 2006), http://www.foxnews.com/printer_friendly_wires/2006Dec07/0,4675,FannieMae,00.html.

[52] When a manager's ownership of stock options increases, the company is more likely to be involved in financial misreporting; however, the manager's ownership of other compensation components, such as restricted stock or long-term incentive payouts, is not associated with a higher propensity to misreport. *See* Natasha Burns & Simi Kedia, *The Impact of Performance-Based Compensation on Misreporting,* 79 J. FIN. ECON. 35, 63 (2006).

[53] *See* Alex Edmans et al., The Long-Term Consequences of Short-Term Incentives (Sept. 15, 2017) (unpublished manuscript) available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3037354 (showing that when vesting equity increases, stock returns are more positive in the two quarters surrounding both repurchases and mergers and acquisitions, but more negative in the two years following repurchases and the four years following mergers and acquisitions).

allowed to sell bigger portions of their equity grants,[54] when their equity grants are more sensitive to changes in stock price,[55] and shortly before they head out the door.[56]

A disturbing example of this practice is the stock option scandals that shook corporate America in the early 2000s. Managers of the scandal-ridden firms reported gains of tens and hundreds of millions of dollars from exercising artificially high value stock options before their firms imploded. In addition, over a thousand companies appear to have illegally backdated the grants of their managers' options.[57] This enabled the managers to secretly pocket high profits at the expense of their shareholders.[58] A more recent example is American Airlines, a company two years out of bankruptcy, facing down $19 billion in debt—and continuing to buy back billions of dollars' worth of company stock.[59]

5. Incentives to Abuse Inside Information

Equity compensation motivates managers to abuse inside information in the equity loading as well as in the equity unloading phases.

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[54] Tomislav Ladika & Zacharias Sautner, Managerial Short-Termism and Investment: Evidence from Accelerated Option Vesting (Feb. 2018) (unpublished manuscript) available at https://papers.ssrn.com/sol3/ papers.cfmabstractid=2286789.

[55] *See* Natasha Bums & Simi Kedia, *The Impact of Performance-Based Compensation on Misreporting,* 79 J. FIN. ECON. 35, 63 (2006).

[56] *See* Paul Kalyta, *Compensation Transparency and Managerial Opportunism: A Study of Supplemental Retirement Plans,* STRATEGIC MGMT. J. 405 (2009) (reporting that lame-duck CEOs tend to boost their performance-based retirement packages by fudging earnings results in ways that often lead to significant stock price declines shortly after they retire. In particular, at companies whose CEOs received performance-based supplementary executive retirement plans (SERPs), the average loss of share price was 8% in the three years after the CEOs retired while at companies whose CEOs did not receive SERPs, the average decline was only 0.3%. SERPs calculate pension payments on the basis of salary, plus the performance of the company just prior to the executive's departure).

[57] *See* Lucian Bebchuk et al., *Lucky CEOs and Lucky Directors,* 65 J. FIN. 2363 (2010); Jesse Fried, *Option Backdating and Its Implications,* 65 WASH. & LEE L. REV. 853 (2008).

[58] The phenomenon was uncovered in 2005 by an Iowa business school professor, Erik Lie, followed by subsequent *Wall Street Journal* investigations. *See* Erik Lie, *On the Timing of CEO Stock Options Awards,* 51 MGMT. SCI. 802 (2005); Mark Maremont, *Authorities Probe Improper Backdating of Options: Practice Allows Executives to Bolster Their Stock Gains; A Highly Beneficial Pattern,* WALL ST. J. (Nov. 11, 2005), at A1; Charles Forelle and James Bandler, *Backdating Probe Widens as Two Quit Silicon Valley Firm; Power Integrations Officials Leave amid Options Scandal; 10 Companies Involved So Far,* WALL ST. J. (May 6, 2006), at A1; Charles Forelle, *How Journal Found Options Pattern,* WALL ST. J. (May 22, 2006), at A11; Charles Forelle*, Hot Topic: Probing Stock-Options Backdating,* WALL ST. J. (May 27, 2006), at A5.

[59] *See* Alsin, *supra* note 49.

On the front end, managers are encouraged to time their equity grants before impending good news about the company becomes public. This practice of informed grant timing is called "spring-loading."[60] Consider the significant stock option grant approved by the Cyberonics board of directors the night before it publicly announced the prospective approvals for one of its products. The next day the company's stock price soared, resulting in the stock options for the chair and CEO gaining $2.3 million in value.[61] Unfortunately, the Cyberonics story is not atypical. Bebchuk, Grinstein, and Peyer found that between 1996 and 2005, 12% of firms provided one or more lucky grants—grants given at the lowest price of the month—owing to opportunistic timing.[62]

Spring-loading has a counterpart known as "bullet-dodging," a term used when managers are awarded stock options following a negative public announcement, thereby preventing the potential reduction in value of their stock and stock option awards that the announcement would trigger.[63] Bullet-dodging has been empirically observed upon option repricing.[64]

In addition to their abuse of inside information on the front end, managers often have considerable control over the timing of their equity sales, enabling them to benefit from their information on the back end. Take, for example, the three senior executives of the credit-reporting company Equifax, who recently sold shares worth almost $1.8 million in the days after the company discovered an unprecedented cyber hack breach compromising the personal information of about 140 million consumers—but before this information was revealed to investors.[65] Immediately after the company made the news public, Equifax shares

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[60] David Yermack, *Good Timing: CEO Stock Option Awards and Company News Announcement,* 52 J. FIN. 449, 458 (1997).

[61] *See* Barnaby J. Feder, *Question Raised on Another Chief's Stock Options*, N.Y. TIMES, June 9, 2006, at C2. Following the publication of the story, federal authorities pursued an investigation, and the CEO and other directors resigned. *See Cyberonics CEO Resigns amid Options Probe*, WALL ST. J. (Nov. 21, 2006), at B2.

[62] *See* Bebchuk et al., *supra* note 57.

[63] *See* JAMES M. BICKLEY & GARY SHORTER, CONG. RESEARCH SERV., RL33926, STOCK OPTIONS: THE BACKDATING ISSUE 28 (2008).

[64] *See* Sandra Renfro Callaghan et al., *The Timing of Option Repricing,* 59 J. FIN. 1651, 1667 (2004).

[65] *See* Andres Melin, *Three Equifax Managers Sold Stock before Cyber Hack Revealed*, BLOOMBERG.COM (Sep. 8, 2017), https://www.bloomberg.com/news/articles/2017-09-07/three-equifax-executives-sold-stock-before-revealing-cyber-hack.

tumbled 13%.[66] This case is not an isolated incident of managers abusing their access to inside information in order to manipulate equity pay unloading. In a study of insider trading in over 1,200 firms, Alan Jagolinzer found that they consistently generate above-market returns on their stock sales.[67]

6. Incentives to Harm Non-Shareholder Stakeholders

Because equity compensation provides them with stock-based claims on the firm, managers might be motivated to divert value from non-shareholder stakeholders to shareholders even when such actions might destroy firm value.[68] Three major techniques can serve them to that end.[69] First, equity-paid managers can make decisions that will siphon assets out of the corporate pool in favor of shareholders ("asset dilution"). Second, they might elevate the riskiness of firm assets even if this will reduce firm value ("asset substitution"); this benefits shareholders at the expense of creditors because if things pan out well, all the extra goes to shareholders, but if things go badly, shareholders are protected by their limited liability. Third, they can benefit from diluting creditors' claims by adding unanticipated new debt that is of equal priority or senior to existing debt claims ("debt dilution"). The loss in value to the existing debt holders will be diverted to the shareholders, including the managers through their equity grants.

In addition, when managers' pay is stock based, they have a personal interest in transferring resources from employees to stockholders.[70] They might do so by laying off workers, moving labor

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[66] *Id.*

[67] *See* Alan D. Jagolinzer, *Sec Rule 10b5-1 and Insiders' Strategic Trade,* 55 MGMT. SCI. 224, 232 (2009).

[68] *See* Edward B. Rock, *Adapting to the New Shareholder-Centric Reality,* 161 U. PA. L. REV. 1907, 1927 (2013).

[69] For the following discussion, *see* REINER KRAAKMAN ET AL, THE ANATOMY OF CORPORATE LAW: A COMPARATIVE AND FUNCTIONAL APPROACH 116-21 (2d ed. 2009) (discussing asset dilution, asset substitution, and debt dilution); Clifford W. Smith, Jr. & Jerold B. Warner, *On Financial Contracting: An Analysis of Bond Covenants,* 7 J. FIN. ECON. 117, 118–19 (1979) (analyzing the areas of conflict between bondholders and stockholders).

[70] *See* William Lazonick, *Labor in the Twenty-First Century: The Top 0.1% and the Disappearing Middle-Class* (Inst. Econ. Think., Working Paper Series No. 4, 2015), *at* https://ssrn.com/abstract=
2586239 or http://dx.doi.org/10.2139/ssrn.2586239.

offshore, dodging taxes, and conducting unnecessary stock buybacks and financially driven mergers and acquisitions.[71]

7. Undercutting Intrinsic Motivation

Scholars of behavioral agency theory contend that the large monetary amounts typical of equity compensation plans overestimate extrinsic incentives. "I do not believe, nor have I ever observed, that $100 million motivates people more than $10 million or $1 million," said one company chairman, discounting the importance of financial rewards.[72] Moreover, the argument goes, the focus on extrinsic incentives discounts nonmonetary motivation, such as achievement, status, power, and teamwork. Behavioral studies indicate that real-world executives emphasize the relative importance of nonfinancial motivation and suggest that they would willingly reduce their pay packages by an average of 28% in exchange for a job that is better in other respects.[73]

Because the introduction of equity compensation increased the gap between CEO and average worker pay, it serves to demoralize firms' lower-level employees, hurt their sense of fairness, and adversely affect their team motivation.[74] Also, the widened social gaps that are created by equity compensation undermine social cohesion; create polarization in society; and expose companies, boards, and executives to reputational risk.[75]

C. The Problem of Overpay

In addition to providing managers with incentives to reduce firm value, equity compensation plays a major role in the unprecedented explosion of executive pay. This explosion is propelled by the inherent inefficiencies of equity compensation and exacerbated by cognitive biases and agency costs that such compensation emphasizes.

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[71] *Id.*

[72] *See* Alexander Pepper et al., *Are Long-Term Incentive Plans an Effective and Efficient Way of Motivating Senior Executives?*, 23 HUMAN. RES. MGMT. J. 36 (2011).

[73] *Id.*

[74] *See* Alexander Pepper et al., *Fairness, Envy, Guilt and Greed – Building Equity Considerations into Agency Theory,* 68 HUMAN RELATIONS 1291 (2015).

[75] *See* Deborah Hargreaves, *If You're a CEO, It Pays to Share Your Wealth. This Seattle Boss Did,* THE GUARDIAN, (Apr. 16, 2015), https://www.theguardian.com/commentisfree/2015/apr/16/dan-price-seattle-boss-shares-dosh.

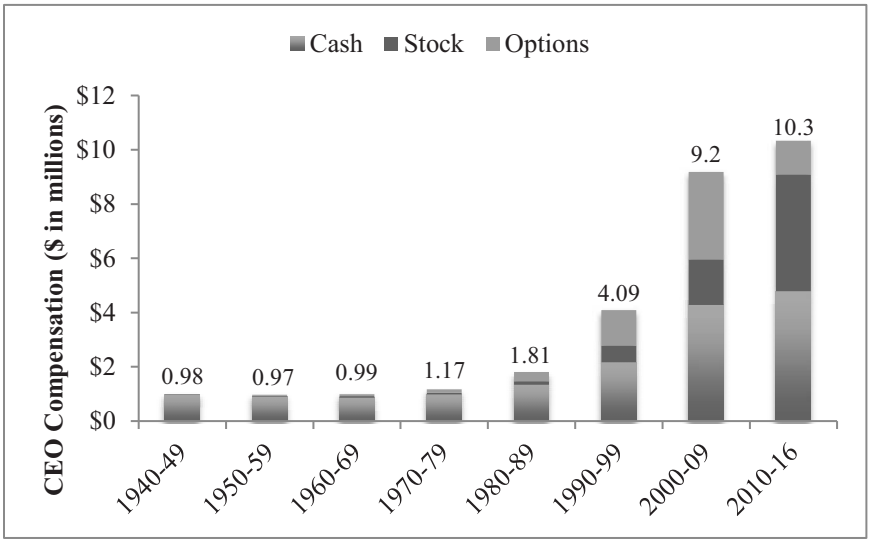
1. The Data

The inception of equity compensation in the early 1990s propelled an exponential increase in CEO pay. As indicated in Figure 2.1, while total pay for CEOs in the largest U.S. firms was stable for half a century, it quintupled during the fifteen years following the introduction of equity pay. During that time, the weight of equity in the pay mix for the median S&P 500 CEO rose from zero to almost two-thirds.[76] Notably, the massive rise in equity pay did not reduce nonequity compensation but rather increased even higher, contributing to the explosion in total CEO pay.

[76] Specifically, in 1985 the median S&P 500 CEO had no equity in his pay package. *See* Kevin Murphy, *Executive Compensation: Where We Are, and How We Got There,* HANDBOOK OF THE ECON. OF FIN. (G. Constantinides, M. Harris, and R. Stulz, eds. Amsterdam: Elsevier/North-Holland (2012). In 2000–2005, in contrast, equity pay made up 60% of total pay. *See* Carola Frydman & Dirk Jenter, *CEO Compensation,* 2 ANN. REV. FIN. ECON. 80 (2010).

Fig. 2.1 Carola Frydman & Raven Saks, *Executive Compensation: A New View from a Long-Term Perspective,* 1936–2005, 23(5) REV. FIN. STUD. 2099 (2010); Kevin Murphy, *Executive Compensation: Where We Are, and How We Got There, in* HANDBOOK OF THE ECONOMICS OF FINANCE (G. Constantinides, M. Harris, and R. Stulz, eds. Amsterdam: Elsevier/North-Holland (2012)); Equilar, *2017 CEO Pay Trends*. (Data are based on the median CEO pay in the largest fifty U.S. firms in 1940, 1960, and 1990 and in companies listed in the S&P 500 Index in 2000 and 2010. Data are taken from ExecuComp. In firms where the title "CEO" is not used, the CEO is identified as the president of the company. Option grants value is calculated using the Black-Scholes option pricing formula. Monetary amounts are converted to 2000-constant U.S. dollars using the consumer price index).

Figure 2.1
Median CEO Compensation, 1940–2016



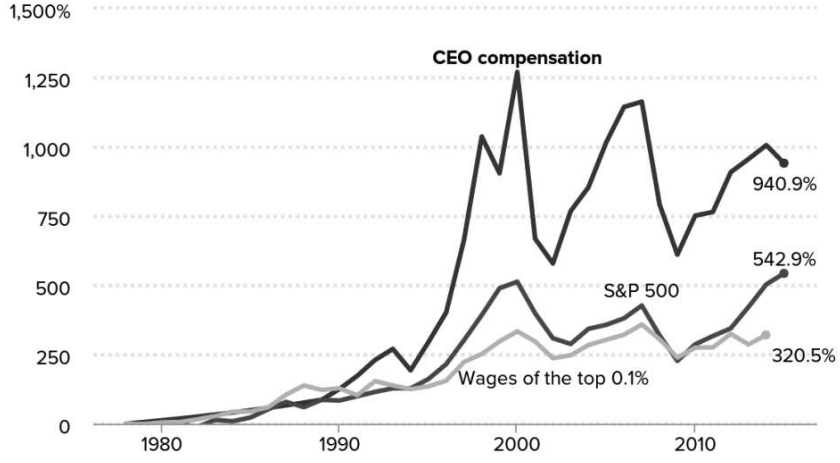
Carola Frydman & Raven Saks, *Executive Compensation: A New View from a Long-Term Perspective,* 1936–2005, 23(5) REV. FIN. STUD. 2099 (2010); Kevin Murphy, *Executive Compensation: Where We Are, and How We Got There, in* HANDBOOK OF THE ECONOMICS OF FINANCE (G. Constantinides, M. Harris, and R. Stulz, eds. Amsterdam: Elsevier/North-Holland (2012)); Equilar, *2017 CEO Pay Trends*. (Data are based on the median CEO pay in the largest fifty U.S. firms in 1940, 1960, and 1990 and in companies listed in the S&P 500 Index in 2000 and 2010. Data are taken from ExecuComp. In firms where the title "CEO" is not used, the CEO is identified as the president of the company. Option grants value is calculated using the Black-Scholes option pricing formula. Monetary amounts are converted to 2000-constant U.S. dollars using the consumer price index).

By all measures, equity compensation has pushed CEO pay obscenely high. First, as indicated in Figure 2.2, CEO compensation rose more than 900% (adjusted for inflation) over the past four decades, doubling the growth in the stock market and tripling the growth of the top 0.1% in America. Second, while CEO pay increased almost tenfold during this period, the average worker's salary, which typically does not include a significant amount of equity, rose just 10.2%,[77] resulting in an exorbitant rise in the CEO-to-average-worker pay ratio from 30:1 in 1978 to roughly

[77] *See* Alyssa Davis & Lawrence Mishel, *CEO Pay Continues to Rise as Typical Workers Are Paid Less,* ECON. POL'Y INST., June 12, 2014.

250:1 today.[78] Third, the heavier reliance on equity among American CEOs[79] results in them pocketing, on average, approximately twice what non-U.S. CEOs make.[80] Finally, during the past four decades, but not before, CEO pay grew more rapidly than the typically less equity-intensive pay of other top executives. Specifically, the median pay ratio of CEOs to the other four highest-paid executives was stable at approximately 1:1.4 prior to 1980[81] but rose to 1:3 by 2016.[82]

Figure 2.2
Cumulative Percentage Change in CEO Compensation, the S&P 500, and the Top 0.1%, 1978–2015



EPI Analysis of Compustat Execucomp, Social Security Administration, and Federal Reserve Bank of St. Louis databases, as applied by the Economic Policy Institute.

Although equity pay has been framed as "incentive compensation," it often serves to pay enormous amounts for failures. Take, for example, the recent case of former Yahoo CEO Marissa Mayer. In June 2017, after nearly five years in her spotty tenure as CEO, she walked away with

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[78] *See* EQUILAR, INC., EXECUTIVE COMPENSATION AND GOVERNANCE OUTLOOK (2017) (on file with author).

[79] *See* Nuno Fernandes et al., *Are US CEOs Paid More? New International Evidence,* 26 REV. FIN. STUD. 323 (2013).

[80] *See* TOWERS PERRIN, WORLDWIDE TOTAL COMPENSATION REPORT - MANAGING GLOBAL PAY AND BENEFITS (2006).

[81] *See* Frydman & Jenter, *supra* note 76.

[82] *See* EQUILAR, INC., EXECUTIVE COMPENSATION AND GOVERNANCE OUTLOOK (2017) (on file with author).

almost $260 million worth of Yahoo shares, options, and restricted stock units.[83] This came after her failure to turn the troubled Internet pioneer around and her involvement in a series of questionable management practices, such as spending $1.1 billion to purchase Tumblr, the largely failed micro-blogging site; wasting money on expensive hires such as ad man Henrique de Castro, who was paid $109 million for fifteen months of work; and failing to prevent two high-profile hacking incidents that affected more than a billion Yahoo user accounts in 2016. Unfortunately, Mayer is not alone. The top five executive teams of Bear Stearns and Lehman Brothers—the biggest failures of the 2008 financial crisis—received and cashed out outrageous amounts of equity compensation during 2000–2008, the years that led to their firms' epic collapse.[84]

Yet, notwithstanding the significant cost to firms' bottom line[85] and public outrage blaming equity pay for severe financial crises, the heavy reliance on equity pay has not been undermined. In particular, the high-profile accounting and stock option backdating scandals of the early 2000s, which aimed to inflate equity compensation and were blamed for contributing to the dotcom bust and the stock market downturn of 2002, did not reduce equity pay. Although S&P 500 CEOs saw their equity pay composition change dramatically, shifting away from stock options toward restricted stock,[86] their equity compensation amounts and percentage of total pay hardly dropped. As reflected in Figure 2.3 below, between 2001 and 2011 the proportion of equity out of total pay declined only modestly—from 61% to 55%. Total pay changed only slightly as well, marginally dropping from $9.3 million in 2001 to $9 million in 2011.

Similarly, the heated rhetoric against executive compensation practices following the 2008 financial crisis merely changed equity pay composition, not reduced it. Specifically, the then President Barack

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[83] *See* Paul R. La Monica, *Marissa Mayer Leaves Yahoo with Nearly $260 Million,* CNN MONEY (June 13, 2017), https://money.cnn.com/2017/06/13/investing/yahoo-marissa-mayer-severance-stock-verizon/index.html.

[84] *See* Bebchuk et al., *supra* note 2, at 257–60.

[85] *See* Lucian Bebchuk & Yaniv Grinstein, *The Growth of Executive Pay,* 21 OXFORD REV. ECON. POL'Y 283, 297 (2005) (indicating that the ratio between the top five executives' aggregate compensation to total earnings jumped from 5% when equity pay was insignificant in the early 1990s to about 10% in the early 2000s).

[86] While stock option value plummeted from 87% to less than 37% in the mix of equity pay, stock grants increased dramatically to almost two-thirds of the average equity makeup of S&P 500 CEOs by 2011 (up from only 13% in 2001). *See* EQUILAR, INC., 2017 *supra* note 11, at 4.

Obama called certain compensation arrangements "shameful,"[87] and Congress promulgated the 2010 Dodd-Frank Act, prescribing new executive pay disclosures and procedures.[88] Consequently, proxy advisors and large institutional investors managed to influence boards to shift abruptly away from awarding time-based to granting performance-based equity.[89] These advisors and investors also pushed companies to move further away from stock options toward restricted stock.[90] Since then, however, equity and total CEO pay have only increased. As indicated in Figure 2.3, while in 2011 equity pay amounted to 55% of total pay for S&P 500 CEOs, by 2016 it had increased to an all-time high of 62%.[91] During the same period, total CEO pay at these companies increased steadily—from $9 million in 2011 to $10.3 million in 2016.[92]

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[87] *See* Sheryl Gay Stolberg & Stephen Lebaton, *Obama Calls Wall Street Bonuses 'Shameful,'* N.Y. TIMES, Jan. 29, 2009.

[88] For example, Congress severely limited equity and total compensation amounts for all Troubled Asset Relief Program (TARP) recipients. *See* Emergency Economic Stabilization Act of 2008, 12 U.S.C. § 5221 (2012). The Dodd-Frank Act imposed new compensation procedures, including the advent of a shareholder nonbinding say-on-pay vote, mandatory equity pay clawbacks, and CEO-to-median employee pay ratio and hedging disclosures. *See* Dodd–Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, §§ 951, 953(b), 954 and 955, 124 Stat. 1376, 1899—1905 (codified at 15 U.S.C. §§ 78n, 78j—4 (2010)).

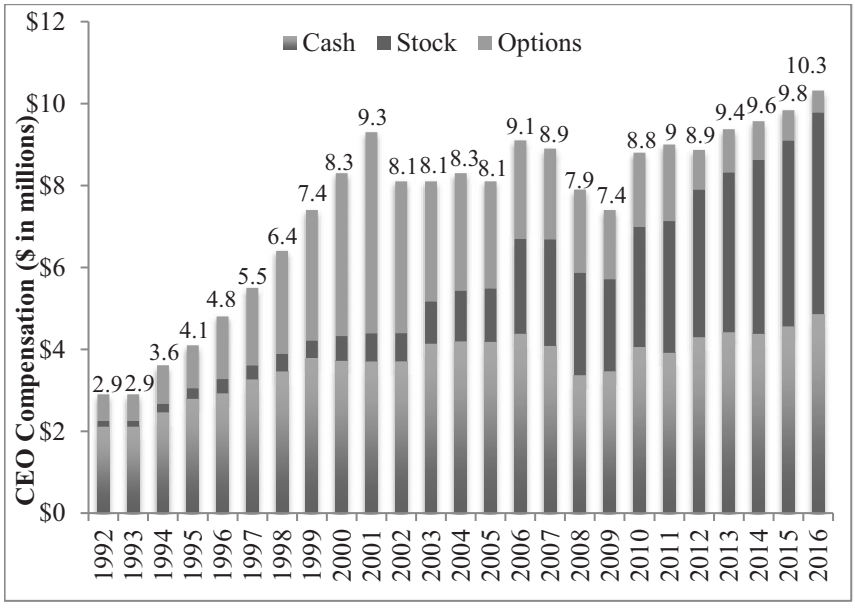
[89] Time-based awards vest with the passage of time. The vesting of performance shares is conditioned on the attainment of certain performance criteria. While in 2011 only 65% of S&P 500 companies granted performance-based equity to their executive officers, five years later nearly five in six companies used them. *See* EQUILAR, INC., LONG-TERM INCENTIVE PLANS: PAY FOR PERFORMANCE TRENDS (March 2017) (on file with author).

[90] In 2012, about 80% of the largest 500 U.S. companies awarded stock options while about 60% awarded stock grants. By 2016, the preferences among large companies were reversed: about 60% of them awarded options while about 80% relied on stock grants. *See* George Erb, *Nike's Mark Parker Leads the Pack, Thanks to a Rich Stock Grant,* THE SEATTLE TIMES, July 15, 2017, http://www.seattletimes.com/business /nikes-parker-leads-the-pack-thanks-to-a-rich-stock-grant/. This shift changed the overall weight of performance-based awards from one-half of the median equity value mix in 2012 to 55% in 2016. *See* EQUILAR, INC., 2017 *supra* note 11, at 22.

[91] *See* figure 2.3 below

[92] *See* figure 2.3 below

Figure 2.3
Median CEO Compensation, 1992–2016



Kevin Murphy, *Executive Compensation: Where We Are, and How We Got There, in* HANDBOOK OF THE ECONOMICS OF FINANCE (G. Constantinides, M. Harris, and R. Stulz, eds. Amsterdam: Elsevier/North-Holland (2012)); Equilar, 2017 CEO Pay Trends. (Data are based on the median CEO pay of companies listed in the S&P 500 Index. Option grants value is calculated using the Black-Scholes option pricing formula. Monetary amounts are converted to 2011-constant US dollars using the consumer price index).

2. Inefficiencies That Boost Executive Pay

The inflation in executive compensation triggered by equity pay is due, in part, to its inherent inefficiencies. Equity compensation is only a second-best contract. First best is a fixed-salary contract, which would be found in a neoclassical world in which the board of directors could directly observe the firm's opportunities and the executive's actions and knew which actions maximized shareholder wealth. However, this cannot be attained in our imperfect world, where the board of directors does not know and cannot specify every action that an executive should take upon each contingency. Therefore, it must leave these decisions up to the discretion of the executive, who typically possesses superior information. To compensate for the information gap, firms bond with their executives and motivate them to take actions that are in the best interest of the

shareholders by linking executive pay to any change in the firm's stock price (i.e., the second-best contract).[93]

a. Risk-Bearing, Diversification, and Liquidity Costs

Unfortunately, equity compensation, which links executive pay to changes in the firm's stock price, incurs significant costs. Importantly, it is a terribly inefficient practice that decreases risk-neutral public shareholders' exposure to firm-specific risk and transfers such risk to the executives, who are averse to it.[94] And by disproportionately increasing executives' holdings in the firm's stock, equity pay renders managers' financial portfolios under-diversified, which, in turn, exacerbates that aversion.

In addition, several factors make equity compensation impose burdensome liquidity constraints on managers. First, firms have universally adopted vesting schedules for their equity grants,[95] and such schedules stipulate that managers may "earn" their stock options or restricted stock only in the future and only after certain conditions are met.[96] Unless stock is earned, it is nontransferable and certainly cannot be sold by the manager. Second, institutional shareholders and directors exert informal pressure to hinder executives from unwinding stock post-vesting.[97] They do so in part because a massive stock sale by an executive may send an extremely bad signal to the markets that the firm's prospects are grim.[98] Third, insider trading rules practically limit managerial unwinding of stock either to predetermined short "trading windows" following the release of quarterly earnings or, alternatively, to plans created before the executive was in possession of material nonpublic

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[93] *See* Jensen & Meckling, *supra* note 18.

[94] *See* discussion in Part I.C. for why senior managers are more risk-averse than diversified shareholders.

[95] *See* EQUILAR, INC., 2014 EQUITY TRENDS REPORT 15–17 (2014) (on file with author).

[96] For time-based vesting, all vesting periods are at least one year in length, and a three-year vesting period is the most common. For performance equity, long-term performance metrics are the most common condition for vesting, with time-based vesting restrictions following such performance periods growing in popularity. *See id.* at 14–16.

[97] *See generally* Bernard S. Black, *Agents Watching Agents: The Promise of Institutional Investor Voice,* 39 UCLA L. REV. 811 (1992).

[98] *See, e.g.,* Ulf Axelson and Sandeep Baliga, *Liquidity and Manipulation of Executive Compensation Schemes,* 22 REV. FIN. STUD. 3907 (2009).

information.[99] Fourth, Section 16(b) of the Securities and Exchange Act aims to prohibit fraud by requiring insiders to disgorge any "short swing" profits realized from any purchase or sale of their firms' securities within six months.[100] Fifth, federal tax rules punish executives who sell their equity compensation in the short term.[101]

b. Cognitive Biases

Contrary to classical economists' assumption of a rational "economic man" who will make the optimal choice regardless of complexity or associated costs, executives, like other people, are limited in their ability to understand and process information.[102] In particular, because of the way that risk, value, and probability are subjectively assessed; the way that the value of future reward is discounted; and the way that cognition responds to uncertainty, cognitive biases systematically reduce the value of equity pay for senior executives.[103]

First, a high bias toward risk aversion among about 80% of the executives sampled by Pepper, Gore, and Crossman in 2011 is often regarded as the norm.[104] Second, executives discount for time more heavily than the economic theory predicts;[105] studies show that they discount distant payouts at the remarkable rate of 30% a year—about five times the discount that economic theory suggests.[106] Third, executives tend to suffer from a psychological bias of loss aversion, which causes them to prefer avoiding losses to acquiring equivalent gains.[107] The trade of safe cash for uncertain equity awards exposes managers to losses they disproportionately dislike. Fourth, because of their "tangible bias,"

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[99] *See* Jesse M. Fried, *Hands-Off Options,* 61 VAND. L. REV. 453, 463 (2011).

[100] *See* 15 U.S.C. § 78p(b) (2012).

[101] If an asset is held for one year or less, the short-term capital gain will be taxed at the ordinary income tax rate of 37% for an executive making more than $600,000 a year. If it is held for more than one year, the long-term capital gain will be taxed at a maximum rate of only 20%.

[102] *See* Herbert Simon, *A Behavioral Model of Rational Choice,* 69 Q. J. ECON., 99, 99 (1955).

[103] *See* Pepper et al., *supra* note 72 at 36.

[104] *See* Pepper et al., *supra* note 72 at 44.

[105] This bias is also referred to as present-biased preferences. *See, e.g.,* Ted O'Donoghue & Matthew Rabin, *supra* note 15, at 103.

[106] *See* O'Donoghue & Rabin, *supra* note 15, at 120.

[107] Loss aversion was first demonstrated by Kahneman and Tversky, *see* Daniel Kahneman & Amos Tversky, Choices, Values, and Frames, 39 AM. PSY. 341(1984).

executives and boards tend to have a mistaken perception that intangible equity grants are cheaper than hard currency cash paychecks.[108]

For the above-mentioned reasons, the economic cost to a firm of granting equity compensation is larger than the value of the equity to the executive receiving it. One executive summed up the situation this way: Companies "are paying people in a currency they don't value."[109] Consequently, executives demand an irrationally high pay premium for accepting the increased risk, diversification, and liquidity costs that equity-based pay imposes on them.[110]

D. Agency Costs

The fact that equity compensation brought executive compensation to record high levels is explained by more than inherent inefficiencies. One should ask why firms pay in equity to begin with. Why, despite the perverse incentives it provides, the high costs it incurs, and the weak relationship between equity pay value and performance, do firms stick with it even in the face of serious allegations about its contribution to immense financial explosions. One possible answer is agency costs and managerial power.

The reality of equity pay practices is inconsistent with arm's-length bargaining between boards and executives. Had arm's-length negotiation been conducted, the introduction of equity pay should have been accompanied by a contemporaneous reduction in cash awards. Also, if equity pay were intended to maximize long-term shareholder value, it would not provide counterproductive incentives for executives.

The agency cost theory is more consistent with the data. According to this perspective, executive compensation arrangements often deviate from arm's-length contracting because directors are influenced by

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[108] This perception stems from "our tendency to favor what we can see and understand over what we cannot." *See* Robert Thiele et al., *The Physiologic Implications of Isolated Alpha1 Adrenergic Stimulation,* 113 ANESTHESIA & ANALGESIA 284, 284 (2011).

[109] *See* Pepper et al., *supra* note 72.

[110] *See, e.g.*, Brian Hall & Kevin Murphy, *Stock Options for Undiversified Executives,* 33 J. ACC. & ECON. 3, 3 (2002); Xavier Gabaix and Alex Edmans, *Tractability in Incentive Contracting,* 24 REV. FIN. STUD. 2, 15 (2011). Also, boards like to overpay executives in equity. Labeling equity pay as "incentive pay" makes boards irrationally justify it even when it is excessive. *See* Amos Tversky & Daniel Kahneman, *The Framing of Decisions and the Psychology of Choice*, in ENVIRONMENTAL IMPACT ASSESSMENT, TECHNOLOGY ASSESSMENT, AND RISK ANALYSIS (Vincent Covello et al. 1985).

executives, sympathetic to them, insufficiently motivated to bargain over compensation, or simply ineffectual in overseeing compensation.[111] Paying equity compensation in addition to, but not in exchange for, cash compensation can be better explained by the power that executives exert over the board of directors to inflate their pay beyond what they could have gotten in arm's-length negotiations. Moreover, the ability of managers to receive windfall compensation for market- and industry-wide movements and to hedge their equity holdings is strong evidence that the use of equity pay empowers executives. Finally, managers receiving "lucky" grants awarded to them at the lowest price of the grant month[112] and then generating significant subnormal returns when selling those grants[113] indicates that equity pay is abused to divert resources from shareholders to managers. Because agency costs are pervasive and persistent, paying executives in equity is costly for shareholders.

III. PAYING IN CASH FOR LONG-TERM PERFORMANCE: ALTERNATIVE PAY ARRANGEMENTS

The significant costs associated with paying executives in equity—overpaying them, providing them with weak incentives at best and with counterproductive incentives at worst—should encourage students of corporate governance and executive compensation to offer alternative pay arrangements for senior management. Unfortunately, all attempts undertaken so far to stop the inflation in total pay that equity compensation has created or to alleviate the perverse incentives engendered by equity pay have failed.

First, efforts to stop the unprecedented skyrocketing of executive pay have been utterly unsuccessful. In particular, the introduction of shareholders' nonbinding say-on-pay votes in 2011, which introduced nascent pressures on executive pay practices, failed to curb total pay amounts; instead, in the five years since 2011, CEO pay has steadily increased by almost 15%.[114] Despite academic studies showing that executive pay amounts are not only at record levels but also significant for public firms' bottom-line profits,[115] the impetus behind these pay increases

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[111] *See* BEBCHUK & FRIED, *supra* note 29, at 23–27 (2004) (describing sources of executives' influence over directors in public companies).

[112] *See* Bebchuk et al., *supra* note 57.

[113] *See* Jagolinzer, *supra* note 67, at 8–10.

[114] *See* Figure 2.3 above.

[115] *See* Bebchuk & Grinstein, *supra* note 85, at 295–297.

has not weakened, and the controversial requirement to disclose CEO pay ratios starting in 2018 seems unlikely to change this reality.[116]

Second, efforts to eliminate the perverse incentives created by managers' freedom to unwind their equity grants have been ineffective. In another article, I report that stock ownership policies, which were universally adopted in the aftermath of the 2008 crisis and require managers to hold some of their firms' stock for the long term, have been extremely ineffectual.[117] Moreover, corporate policies suggested by legal academics and financial economists to limit the ability of managers to sell their equity grants have not been adopted.[118]

Because equity pay engenders pervasive and persistent inefficiencies, scholars of behavioral agency theory contend that companies should eliminate it and increase other pay components, such as base salary and annual bonuses.[119] Unfortunately, this line of thought creates another type of incentive problem: how will executives be motivated to maximize long-term firm value if they do not receive long-term incentives? [120]

This Article proposes a novel arrangement aimed at eliminating the exorbitant costs of equity compensation while preserving its benefits.[121] Specifically, I suggest that instead of paying executives in equity for attaining long-term performance targets,[122] they should be paid in cash.

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[116] *See CEO Pay Ratio Survey Results: The Bigger the Company, the Larger the Pay Gap*, EQUILAR INC. (Feb. 1, 2018), http://www.equilar.com/blogs/355-equilar-ceo-pay-ratio-survey-results.html.

[117] *See* Shilon, *supra* note 12, at 363.

[118] For discussion and analysis of such proposals, *see infra* Part IV.B.

[119] *See, e.g.,* Alexander Pepper, *The Case against Long-Term Incentive Plans,* HARV. BUS. REV., Oct. 2016, at 22–23; Alexander Pepper et al., *Are Long-Term Incentive Plans an Effective and Efficient Way of Motivating Senior Executives?,* 23 HUM. RES. MNG. J. 36 (2011).

[120] Other proposals, which offer the use of company debt as efficient compensation in addition to the use of equity-like instruments, do not focus on how to reform equity pay itself. *See, e.g.,* Alex Edmans & Qi Liu, *Inside Debt,* 15 REV. FIN. 75, 76–86 (2011). *See also* Lucian Bebchuk & Holger Spamann, *Regulating Bankers' Pay,* 98 GEORG. L. J. 247 (2010).

[121] A body of empirical studies indicates that incentive compensation increases firm value (except among CEOs with very large fractional equity ownership). *See, e.g.*, Morck et al., *supra* note 10, at 293–95; John McConnell & Henri Servaes, *Additional Evidence on Equity Ownership and Corporate Value,* 27 J. FIN. ECON. 595, 599 (1990); Melissa Frye, *Equity-Based Compensation for Employees: Firm Performance and Determinants,* 27 J. FIN. RES. 31, 34–35 (2004).

[122] Since 2011 there has been a sharp shift from time-based to performance-based equity awards, which already amount to 55% of total equity compensation. *See* EQUILAR, INC., 2017, *supra* note 11, at 22.

To this end, I propose two variants for how firms should design their cash-for-performance schemes: the Predetermined Cash Amount (PCA) plan and the Performance Phantom Shares (PPS) plan. I address separately how time-based equity should be adjusted.

In applying these plans, firms should tailor their performance criteria to their specific executives and firm characteristics. In particular, they should consider managers' risk aversion as well as their ability to influence results;[123] firm growth opportunities;[124] and the measurement accuracy of performance criteria, which might include relative total shareholder return, return on capital, earnings per share, and nonfinancial benchmarks.[125]

A. Predetermined Cash Amount Plan

Under the PCA plan, attaining certain performance criteria would entitle the executive to receive a predetermined fixed amount of cash.[126] For example, the plan might stipulate that CEOs will receive $100 if they meet their long-term target performance criteria, $200 if they excel and meet a certain maximum performance, or $50 if they achieve only certain minimum performance.

This plan has several advantages over the PPS plan. First, by defining in advance the absolute cash amounts that executives would receive per each performance contingency, it ensures that awards are strictly independent of stock price. Therefore, unlike the PPS plan described below, it would not reward executives for market- and industry-wide windfalls (pay for pulse); it would not expose executives to significant risk that is beyond their control; and it would not incentivize executives to take excessive risks, prefer the short term over the long term,

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[123] The pay distribution per the performance criteria should be more convex when results are more sensitive to the manager's actions and when the manager is less risk-averse. *See* Holmstrom, *supra* note 9, at 309–17; Thomas Hemmer et al., *Introducing Convexity into Optimal Compensation Contracts*, 28 J. ACC. & ECON. 307, 315–17 (1999).

[124] *See* Guay, *supra* note 26, at 43 (showing that firms with greater growth opportunities provide more risk-taking incentives and that firm risk is indeed greater when managers hold more risk-taking incentives).

[125] Relative total shareholder return, return on capital, earnings per share, revenue, and operating income/margin have been the five most popular performance metrics in each of the past five years. *See* EQUILAR INC., *supra* note 120, at 8.

[126] Such predetermined cash amounts may be linked to the consumer price index, the national average salary, or any other index that is not directly linked to the firm's stock price.

or otherwise manipulate the stock price in order to maximize the measurement day's stock price.

Second, boards would be able to use a PCA plan better than a PPS plan to tailor an incentive suit specific to each executive. This is because a PCA plan completely separates form of pay (cash) from performance criteria, allowing program planners to design incentives using deliberate performance criteria irrespective of absolute changes in stock price. Indeed, not a single firm today uses an absolute change in stock price as a performance criterion, thereby avoiding the significant pay-for-pulse component embedded in absolute changes in stock price.[127]

Third, because it eliminates any reference to stock price changes, a PCA plan is better at bridging the gap between short-term measurement and long-term strategy than a PPS plan. When corporate strategy anticipates providing financial results later than the measurement date,[128] the stock price on the payday will not necessarily reflect the long-term effect of short-term policies. This is especially true when markets are inefficient. Conversely, well-crafted performance criteria should define the milestones through which the board thinks executives would achieve the ultimate goal of long-term value creation. These criteria can use nonfinancial targets in addition to relative stock price and financial metrics.[129]

B. Performance Phantom Share Plan

Under the PPS plan, attaining predetermined performance targets would entitle the executive to pocket the cash equivalent of a fixed amount of stock. For example, CEOs will receive the dollar value of 100 shares if they meet their long-term target performance criteria, the cash value of 133 shares if they achieve maximum performance, or the cash value of only 75 shares if performance is at minimum.[130]

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[127] The closest measure to absolute change in stock price that firms use is a total shareholder return metric, which is a relative, rather than an absolute, measure.

[128] As of fiscal year 2015, an overwhelming majority (77%) of S&P 500 firms used a three-year performance period for their CEOs' long-term incentive plans. *See* EQUILAR, INC., 2016, *supra* note 11, at 10.

[129] Indeed, in evaluating performance, some firms already incorporate nonfinancial measures that relate to the objective of the company, such as safety, reliability, and customer satisfaction. *See* EQUILAR, INC., 2017, *supra* note 11, at 8.

[130] The PPS cash awards under this example would equal the cash amounts under the PCA example above if the stock price would remain at $1 for attaining target performance, increase to $1.5 for maximum performance, and decrease to $0.66 for minimum performance.

This plan has several advantages over the PCA plan. Unlike the PCA approach, PPS plan would incentivize executives to maximize two measures at the same time: (1) the performance criteria, which determine the number of stock equivalents they would be awarded; and (2) the stock price, by which each stock equivalent is multiplied to determine its cash award. Therefore, the plan would enjoy an incentive multiplier: as firm performance improves, the executive would receive not just more stock but also more valuable stock.

Moreover, because part of the pay in a PPS plan is determined by the stock price on the payday, the plan would work better than a PCA plan when the board misses the mark in defining performance criteria—which it might do for several reasons. First, the board might pick the wrong growth drivers. For example, it might think that the focus should be on earnings per share, while the more effective value generator for increasing firm value is revenue or relative total shareholder return. Second, it might fail to anticipate future events. For example, it might set the performance goal at 1% of relative total shareholder return measured in three years. A year later, however, significant events in the peer group firms might happen, such as takeovers, internal management or labor problems, and stock buybacks, which would significantly change the desirable performance target.

Importantly, a PPS plan is less vulnerable than a PCA plan to agency problems. Whereas a PCA plan selects only subjective performance criteria, a PPS plan also invokes objective stock price. This renders it more immune to situations where boards and executives work together to pick performance measures that would inflate executive pay,[131] which is especially easy for them to do when such criteria are highly complex and hard to control. Indeed, companies often design multiple performance awards; multiple metrics are frequently linked to each individual award;[132] and there is great variation in performance metrics and design across firms.[133] Recently, performance share plans have been moving toward an even more varied and complex structure.[134]

To avoid manipulation or random variation in stock price on the payment date, the arrangement may stipulate that, for the purpose of the cash payment, the stock price would equal the weighted average price of the firm's stock during the last thirty days before the award's payment date.

[131] *See* BEBCHUK & FRIED, *supra* note 109.

[132] *See* EQUILAR INC., *supra* note 89 at 13–14.

[133] *See* Charlie Pontrelli,, *All TSR Incentive Plans Are Not Created Equal,* EQUILAR INC. (Oct. 10, 2017), http://www.equilar.com/blogs/316-tsr-not-created-equal.html.

[134] *Id.*

Therefore, when agency costs are low, the PCA approach would be preferable and would reap all the important benefits that result from separating executive pay entirely from absolute changes in stock price. Yet, when the executive team is likely to dominate the board and influence the setting of its own performance criteria, it might be worthwhile to take the PPS approach and sacrifice some of the benefits of the PCA approach.

Importantly, despite their potential costs,[135] both approaches are expected to provide better results than the status quo. When agency costs are low, the PCA approach would work better than current arrangements for the reasons discussed in Part D below. When agency costs are high, the PPS approach would still work better because (i) it would keep a significant portion of the benefits of PCA plans; and, especially, (ii) it would avoid the troubling incentive problems related to executives' freedom to unload their equity incentives,[136] including their performance shares.

C. Adjustments to Other Pay Arrangements

The reform proposed in this Article to institute performance-based cash awards does not work in isolation from other pay arrangements. In fact, those other arrangements should be improved and integrated with the suggested reform in mind. While a full delineation of necessary improvements to those arrangements should be made in future research, this section describes the principles for them as applied to two major arrangements: time-based equity plans and clawback provisions.

1. Adjustments to Time-based Equity Plans

Reforming time-based equity plans is important for two reasons. First, the perverse incentives created by the freedom to unload equity grants, as well as the problem of overpay, do not apply exclusively to performance-based grants but also apply to time-based equity awards. Second, despite the rapid growth in performance-based equity, 45% of equity compensation today is made in time-based equity awards.[137]

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[135] *See infra* Section IV.

[136] *See* Section II. B.

[137] *See* EQUILAR, INC., 2017, *supra* note 11, at 22 (reporting that the median long-term incentive mix comprising time-based awards decreased by an even five percentage points between 2012 and 2016 to nearly 55%).

Consistent with my proposal to reform performance-based equity, I recommend doing away with the current practice of awarding time-based equity that, after vesting, may be unloaded at any time. Instead, I suggest splitting what currently is being paid in time-based equity into two new pay vehicles: long-term equity and time-based cash awards.

Long-term equity refers to equity grants that executives would be required to hold for the long term—say, until retirement or thereafter. This vehicle would complement a cash-for-performance scheme well. First, it would offset the inevitable decrease in executives' post-grant-date incentives that cash for performance imposes, and it would do so more effectively than a time-based equity grant because, unlike that award, long-term equity may not be freely unwound after vesting. Second, it would create additional value for shareholders because holding equity without the ability to unwind it in the short term would align executives' long-term interests with those of shareholders better than a time-based equity grant.

The second vehicle I propose is time-based cash awards. Such awards would employ vesting schedules similar to those currently used for time-based equity but, once they vest, would be paid in cash. For example, an award of 300 stock, of which one-third, or 100 stock, vests each year, would be replaced with the cash equivalent of the same amount of stock using the same vesting schedule.[138] Alternatively, and for similar reasons explained with cash-for-performance plans, time-based cash can use a predetermined cash amount approach. Under that approach, for example, executives would receive an award of $300, of which one-third, or $100, vests each year.[139] Using time-based cash would enable firms to retain good talent, which currently serves as the main justification for time-based equity.[140]

A firm-specific cost-benefit analysis should be used to decide the desirable split between time-based cash and long-term equity. The main

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[138] To avoid manipulation or random variation in stock price on the payment date, the arrangement should stipulate, similar to the PPS approach, that for purposes of time-based cash, the stock price would equal the weighted average price of the firm's stock during the last thirty days before the award's payment date.

[139] Similar to the PCA approach, the predetermined cash amounts may be linked to the consumer price index, to the national average salary, or to any other index that is not directly linked to the firm's stock price.

[140] *See* EQUILAR, INC., 2017, *supra* note 11, at 23.

benefit of time-based cash is that it saves the liquidity, diversification, and risk-bearing costs that long-term equity incurs. Conversely, the main benefit of long-term equity is its efficacy in aligning executives' incentives with the interests of long-term shareholders. While any evaluation of this trade-off is firm-specific, it is important to note that if a firm wishes to adhere to its current stock ownership policies, most of its time-based grants should be made in time-based cash and not in long-term equity.[141]

2. Adjustment to Clawback Policies

Excess-pay clawback arrangements, which require firms to recoup excess pay resulting from errors in performance measures (such as reported earnings), should apply to cash-for-performance plans. Clawbacks prevent the systemic diversion of value from shareholders to the executives and the destruction of value resulting from the manipulation aimed at generating excess payouts.[142] Fortunately, Section 954 of the Dodd–Frank Act requires mandatory clawbacks in all public firms and covers all incentive-based compensation.[143] Because the suggested cash-for-performance plans are performance based, they should also be covered by this provision.

Yet, because cash-for-performance awards are made in cash, there might be a practical problem in recouping excess pay. Unlike with equity compensation, executives would have already cashed out their pay by the time they are required to return excess pay remuneration. Therefore, I suggest that a portion of cash-for-performance awards be placed in the company's deferred compensation account to facilitate an effective recoupment of excess pay if necessary.[144] Recouping cash from such an

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[141] Currently, the median and most common threshold required by stock ownership policies for S&P 500 CEOs is five times the base salary, or $5 million, that should be attained after five years of service. *See* Shilon, *supra,* note 12. Because median time-based grants for such CEOs are currently at approximately $2.3 million a year, long-term equity of only $1 million a year, equal to 43% of the current scope of time-based awards, should be made in long-term equity in order to comply with current stock ownership policies. S*ee* EQUILAR, INC., 2016, *supra* note 11 at 19. The remainder should be made in time-based cash.

[142] *See* Jesse Fried & Nitzan Shilon, *Excess-Pay Clawbacks,* 36 J. CORP. L. 721, 728 (2011).

[143] Dodd–Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 954, 124 Stat. 1376, 1904 (2010) (codified at 15 U.S.C. 78j—4 (2010)).

[144] For example, the company may place one-third of each award in a deferred compensation account for three years and may continue to hold such amounts in this account for a longer time if the executive elects to do so. Because many executives place significant portions of their cash awards in deferred compensation accounts voluntarily anyway, the additional liquidity burden for managers is expected to be modest. *See* David Walker, *The Practice and*

account would be fairly easy because that money, although earned by the executive, is held in the company's own account.

D. Benefits of the Proposed Reform

Paying executives in cash in lieu of stock and stock options would avoid the myriad perverse incentives created by equity compensation. Moreover, the separation that paying in cash for long-term performance creates between form of pay (cash) and performance criteria would allow boards to connect pay, performance, and incentives more effectively and more transparently. In addition, this reform would save risk-bearing, diversification, and liquidity costs for executives, allowing boards to push for a reduction in executive pay.

1. Improved Incentives and Transparency

The trade of equity for cash would not reduce executive incentives but would, in fact, improve them. For starters, it would discourage the chronic value-destruction incentives attached to having gigantic amounts of equity grants that, under the current system, may be unloaded at any time.[145] As I noted in my introduction to this Article, such incentives, which are inherent in the system of rewarding executives in equity, cannot be cost-effectively eliminated by imposing unloading restrictions.

In addition, cash-for-performance plans, and especially PCA plans, would greatly improve the tie between pay and performance. They would do so by replacing the equity pay metrics, which barely reflect executive performance,[146] with performance criteria that could be optimally designed to measure executives' actions and their success in meeting well-defined milestones in furtherance of long-term corporate strategy. Moreover, the move from a single scorecard to a variety of performance criteria would help to avoid pay value manipulation.

Furthermore, incentives would improve because cash-for-performance plans facilitate more accurate and effective measures of

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Tax Consequences of Nonqualified Deferred Compensation (April 2017) (unpublished manuscript) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2817406 (explaining that nonqualified deferred compensation plans afford executives diversification benefits and provide joint tax considerations for firms and executives).

[145] *See* Shilon, *supra* note 12 (reporting that despite stock ownership policies that firms adopt, CEOs are generally allowed to unload virtually all the stock they own immediately).

[146] *See supra* Part II.A.1.

performance than equity plans. For example, even if holding periods are mandated, equity plans never define the unloading date of their underlying grants. This feature, in addition to the creation of opportunistic incentives to manipulate stock price around the unloading date and to take advantage of inside information in timing stock unloading, also makes it impossible for equity pay to control the amount and type of incentives at any point in time. Cash-for-performance plans avoid this pitfall by defining in advance the incentive periods as well as the periods in which performance is measured.

For similar reasons, cash-for-performance plans would make incentive compensation more transparent than equity plans. Currently, under equity plans, because investors cannot tell when their executives will sell their incentive compensation, they cannot tell what incentives those plans provide. Given that executives' stock unloading activity is typically significant,[147] the inability of investors and boards to know when their executives will sell their stock is material. Cash-for-performance plans would make executive incentives clear and transparent. Investors would be able to accurately calculate the sensitivity of their management team's pay to changes across a wide array of performance measures. They would also be able to compare these measures to industry and market norms.

Improving transparency is a timely goal because some investors fear that the removal of certain features of Internal Revenue Code (IRC) Section 162(m), as called for by the 2017 Tax Cuts and Jobs Act (discussed below), may encourage companies to be less transparent, less performance based, and less well governed in awarding executive compensation than they were before.[148] Adopting cash-for-performance plans would alleviate this concern because pay would not only be more closely aligned with the achievement of performance criteria but would also be more simple to understand and more transparent.

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[147] *See* Ladika, *supra* note 33.

[148] *See* David Kokell et al., Institutional Shareholder Services, Inc. *U.S. Tax Reform: Changes to 162(m) and Implications for Investors,* HARV. L. SCH. F. CORP. GOV. & FIN. REG. (Jan. 25, 2018), https://corpgov.law.harvard.edu/2018/01/25/u-s-tax-reform-changes-to-162m-and-implications-for-investors.

2. Reduced Pay

The December 2017 Tax Cuts and Jobs Act reform, which makes executive compensation more costly for firms, should make the reduction of executive pay a top agenda item for public firms. Specifically, the act revises IRC Section 162(m) so that, starting in the 2018 tax year, firms are no longer allowed to deduct compensation in excess of $1 million paid to their top five executives.[149] With the new corporate tax rates, firms are practically losing a tax shield of 21 cents on the dollar for every dollar they pay in excess of $1 million to each of those executives. The resulting lost annual deductions for Russell 3000 companies amounts to more than $30 billion in the aggregate.[150] Reducing executive pay would save firms not only their direct compensation expense but also their lost tax shield.

By paying executives for performance in cash rather than in equity, firms should be able to turn back the disproportionate increases in executive pay. This reform would eliminate the tendency of boards to underestimate the economic cost of equity pay for the simple reason that paying in stock and stock options does not involve any cash outlay.[151] Because executives value cash as a currency significantly more than they value stock and stock options,[152] trading equity pay for a lower value of cash would make both investors and executives better off.

Moreover, the reversal of equity plans—as well as the transfer back of risky shares from risk-averse under-diversified executives, who value them less, to risk-neutral, well-diversified public shareholders, who value them significantly more—would create a surplus to be shared between executives and shareholders. An arm's-length negotiation between boards and corporate executives would split this surplus fairly and trade cash payments in lieu of equity for a reduction in total amounts paid to executives.

Because of lapses in corporate governance, executives exert a lot of power in setting their own pay arrangements,[153] and hence boards are not

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[149] *See How Tax Reform may Affect Executive Compensation*, WALL ST. J. (Feb. 5, 2018), https://deloitte.wsj.com/cfo/2018/02/05/how-tax-reform-may-affect-executive-compensation.

[150] *See* Matthew Goforth, *Tax Reform and the Effect on Equity Compensation,* EQUILAR (Jan. 23, 2018), http://www.equilar.com/reports/53-tax-reform-and-equity-compensation.

[151] *See* Hall & Murphy, *supra* note 22.

[152] *See supra* Part II.A.2.

[153] *See, e.g.*, BEBCHUK & FRIED, *supra* note 29, at 1.

expected to conduct intense, hard-nosed bargaining with their executives to implement the suggested reform in a way that would reduce executive pay. Therefore, I illustrate in the next section how vigorous promotion of the suggested reform by proxy advisory firms and institutional investors, together with the removal of certain regulatory distortions, would mimic arm's-length bargaining and produce the expected benefits of the reform for both executives and investors.

E. Implementation

Corporate executives, boards, and compensation consultants are expected to oppose my proposed reform. Corporate executives are likely to attack it because the status quo serves them well: paying in equity for long-term performance makes their salaries soar, and the cash-for-performance reform would reduce their compensation. Boards and corporate executives would likely resist the reform because equity compensation is marketed as "pay for performance," rhetoric that protects executives' reputation and supports their high salaries, enabling both executives and boards to justify it as a practice that serves shareholders well, even if it does not. And compensation consultants are also expected to oppose the reform unless it is systemic; this is because following norms and uniform compensation practices minimizes their own risk of making mistakes or facing public outrage.

Moreover, deviating from the norm is likely to provoke suspicion in the marketplace. This is because of network effects in corporate governance, in which firms are influenced by each other's governance decisions.[154] Perhaps it happens because firms interpret the market norm as proof of quality. Or perhaps they only want to follow the trend. In either case, this is a self-perpetuating rationale: everyone adopts equity compensation arrangements because everyone else is doing it. Such a destructive network effect was the primary reason why the gigantic pharmaceutical company Johnson & Johnson withdrew from its long-term cash-for-performance program. Specifically, it announced in 2012 that:

> While the legacy Certificates of Long-term Compensation (CLC) and Certificates of Long-term Performance (CLP) plans served as highly effective incentive and retention programs for over 60 years, the Committee recognized the need to move to a new program that is more consistent

[154] *See* Sarath Sanga, *Network Effects in Corporate Governance* (Nw. Pub. L., Working Paper No. 17-31, 2017), https://ssrn.com/abstract=3086245.

> with practices at peer companies. The Committee believes that discontinuing cash-based long-term incentives . . . [is] the largest overhaul in the design of our executive compensation program since Johnson & Johnson became a publicly-traded company in 1944.[155]

For these reasons, implementation of cash-for-performance plans must be undertaken with the following principles in mind.

1. Systemic Reform

In emphasizing systemic reform, I do not recommend mandating a one-size-fits-all policy. First, my proposal requires discretion in deciding which cash-for-performance scheme—the PCA or the PPS variant—is the right choice for each firm. Second, it recommends that each company custom fit its plan, as well as its performance criteria, to the specific characteristics of the firm and its executives. Third, it requires a firm-specific determination of the desirable split between time-based cash and long-term equity awards. Finally, I believe that a private ordering approach, which does not prescribe how incentive compensation should be designed but rather leaves it up to market participants to decide, better serves free markets, growth, and economic efficiency.

Making cash-for-performance reform systemic without a direct regulatory fiat requires the engagement of proxy advisors and institutional investors. I recommend that the leading proxy advisory firms, Institutional Shareholder Services Inc. (ISS) and Glass, Lewis & Co., LLC (Glass Lewis), which together account for 97% of the industry, reward firms for adopting rigorous cash-for-performance plans. They should do so by (1) advising shareholders to vote for stockholder proposals that push companies to adopt such plans, (2) rewarding firms that adopt such plans on their proxy voting recommendations,[156] and (3) recommending that

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[155] *See* Johnson & Johnson Inc., Proxy Statement (Form DEF 14A), at 30-31 (Mar. 14, 2012).

[156] ISS uses QualityScore, a data-driven scoring and screening solution, to reward firms that adopt its recommended policies. This tool covers areas of board structure, compensation programs, shareholder rights, and audit and risk oversight. Scores indicate relative quality and are supported by factor-level data. *See* INSTITUTIONAL SHAREHOLDER SERVS. INC., QUALITY SCORE, https://www.issgovernance.com/solutions/iss-analytics/qualityscore/. The Glass Lewis proxy guidelines cover the quality assessment of the board of directors, the link between compensation and performance,

shareholders vote on say-on-pay for firms with cash-for-performance plans. Because ISS and Glass Lewis have a tremendous influence on firms, their support for this reform is expected to play a decisive role in pushing firms to adopt it.[157]

Institutional investors should exert their own pressure on firms to systemically implement cash-for-performance arrangements. Specifically, they should press firms that unreasonably oppose the adoption of such arrangements by (1) submitting 14a-8 stockholder proposals to gain other shareholders' support,[158] (2) casting negative say-on-pay votes,[159] and (3) voting against the reelection of compensation committee chairs and members.[160]

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governance structure, and shareholder franchise and initiatives. *See* GLASS LEWIS 2018 PROXY PAPER GUIDELINES, http://www.glasslewis.com/wp-content/uploads/2017/11/US_Guidelines_2018.pdf.

[157] ISS is so influential that companies often tailor their policies to meet its guidelines, and firms lobby for ISS support to fend off shareholder proposals. According to Chief Justice Leo Strine, "[P]owerful CEOs come on bended knee to Rockville, Maryland, where ISS resides, to persuade the managers of ISS of the merits of their views about issues like proposed mergers, executive compensation, and poison pills." *See* Leo E. Strine, Jr., *The Delaware Way: How We Do Corporate Law and Some of the New Challenges We (and Europe) Face*, 30 DEL. J. CORP. L. 673, 688 (2005). The relentless efforts that former Hewlett-Packard CEO Carli Fiorina made to gain ISS support in the Hewlett-Packard-Compaq merger demonstrate the firm's decisive importance. *See* Pui-Wing Tam & Gary McWilliams, *H-P Garners Major Endorsement of Deal: ISS Advisory Firm Backs Acquisition of Compaq; Vote Seen as Still Close*, WALL ST. J. (Mar. 6, 2002), at A3 (reporting that "many money-management firms take ISS's reports into account before voting in a proxy battle").

[158] Section 14a-8 of the Securities and Exchange Act of 1934 allows shareholders to communicate with their firms and encourages them to adopt the corporate governance policies they wish to have. *See* 17 C.F.R. § 240.14a-8 (2017). Institutional investors typically comply with the section's requirements, such as one-year's and $2,000 worth of stock holdings.

[159] Shareholders vote against pay arrangements they do not like, and firms are forced to adjust. For example, in May 2015 nearly 40% of J.P. Morgan Chase shareholders disapproved of the pay packages of the bank's executives, arguing that the company lacked concrete goals for its executives to determine compensation and that the board did not give a good reason for giving the bank's CEO, Jamie Dimon, a $7.4 million cash bonus. Following this negative signal from shareholders, in May 2015, J.P. Morgan's board said it was weighing changes to executive compensation. Specifically, it started paying Dimon with so-called performance share units, a type of restricted stock that has requirements for how long it must be held and might be worth nothing, depending on the performance of Mr. Dimon and the bank. *See* David Henry, *39% of JP Morgan's Shareholders Voted against Jamie Dimon's Pay Package*, REUTERS (May 19, 2015) http://www.businessinsider.com/r-jpmorgan-executive-pay-wins-slim-support-from-shareholders-2015-5; Emily Glazer, *JPMorgan's Dimon Received $29.5 Million Pay Package in 2017*, WALL ST. J. (Jan. 18, 2018), https://www.wsj.com/articles/jpmorgans-dimon-to-receive-29-5-million-for-2017-1516313712.

[160] Institutional investors traditionally use such a technique to protest against unacceptable compensation practices in their portfolio companies. For instance, the California

That institutional investors can wield such influence has already been proven. Over the last ten years, they have been able to push firms to do away with undesirable corporate governance policies—most notably, the two most popular and effective antitakeover defenses: the staggered board and the poison pill.[161] These investors should exert the same level of enthusiasm and initiative in campaigning for cash-for-performance compensation reform.

2. Elimination of Distortions and Misperceptions

Currently, equity compensation enjoys favorable tax and disclosure treatment compared to cash, which might encourage firms to pay their executives in equity even though paying in cash, absent tax and disclosure considerations, would create more value for their shareholders. In addition, firms should liberate themselves from the misperception that equity pay is cheap simply because it does not incur a cash outlay. For firms to correctly evaluate the economic desirability of a cash-for-performance reform, tax and disclosure rules for equity and cash remuneration should be on a level playing field and distortive tax rules should be eliminated.

a. Distortive Tax Rules

Unfortunately, U.S. tax rules favor equity over cash, and advantageous tax treatment applies to both option and stock compensation.

Public Employees Retirement System (CalPERS) announced in July 2000 that it would vote against two compensation committee members at Ohio-based STERIS Corporation to protest an "outrageous" contract being awarded to its departing CEO and chairman, Bill Sanford. It also adopted a program in December 2006 to withhold votes from former compensation committee chairs at companies where top officers have departed amid option backdating scandals. See *CalPERS to Vote Against Steris Corporation Compensation Committee Members*, BUS. WIRE (July 20, 2000), https://www.thefreelibrary.com/CalPERS+to+Vote+Against+Steris+Corporation+Compensation+Committee...-a063582649. *See also Calpers Targets Four Directors of Three Companies on Stock-Option Backdating,* FIN. WIRE (May 29, 2007).

[161] *See* FactSet Research Systems Inc., Dataset, Sharrepellent.net, http://sharkrepellent.net. A special contribution to these efforts was made by the Shareholder Rights Project, directed by Professor Lucian Bebchuk, which has succeeded in getting about a third of all S&P 500 companies with staggered boards to destagger them. *See* S'HOLDER RIGHTS PROJECT, THE SHAREHOLDER RIGHTS PROJECT 2012 REPORT (2012), http://www.srp.law.harvard.edu/releases/SRP-2012-Annual-Report.pdf [https://perma.cc/SH37-VHHM].

For restricted stock,[162] executives may reduce their tax burden if they use their right to a "section 83(b) election,"[163] according to which the tax event for the company and the executive happens on the date of grant instead of when the stock vests. This typically reduces the tax rate because the stock price on the grant date is expected to be lower than the price upon vesting, allowing the executive to save the tax on the difference.

Stock option compensation gets favorable tax treatment if it is "qualified" (known also as "incentive").[164] Qualified stock options avoid the high ordinary income tax rates if they are held for twelve months after exercise and are not sold until two years after the grant date. Instead, executives owe only the significantly lower long-term capital gains tax[165] on gains above the exercise price when the stock is eventually sold. They also escape social security taxes, regardless of when the sale occurs.[166]

b. Distortive Disclosure Rules

First, the *ex-ante* grant-date fair value method used for reporting equity compensation is conceptually and practically different from the *ex-post* realized pay disclosed for cash incentives. Specifically, the Securities and Exchange Commission (SEC) follows the Financial Accounting Standards Board's Accounting Standards Codification (ASC) Section 718 (formerly FAS 123R) with regards to compensation reporting. According to this rule, stock and option awards are reported using models and assumptions to estimate the grant-date fair value of equity awards given

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[162] Restricted stock is stock that will be forfeited if preset service-based or performance-based conditions are not met. *See Restricted Stock Unit Fundamentals*, MERIDIAN (July 2011), http://www.meridiancp.com/images/uploads/13_Restricted_Stock_Unit_RSU_Fundamentals.pdf.

[163] INT. REV. CODE of 1954, §83 (added by Tax Reform Act of 1969, Pub. L. No. 91-172, §321(a), 83 Stat. 487 (1969)).

[164] For a stock option compensation to be considered "qualified," it should be (1) approved by the board of directors with a limit on the number of options that can be granted, (2) limited to $100,000 valued at the grant date that can vest each year, and (3) granted only to employees and exercised only during employment.

[165] *See* Bebchuk & Grinstein, *supra* note 85 (for a practical explanation of how this works).

[166] Before January 2018, IRC Section 162(m) allowed firms to deduct performance-based compensation even if made in excess of $1 million a year. Firms used this provision to deduct equity compensation expenses. While it favored equity compensation to straight cash remuneration, Section 162(m) did not favor equity to performance-based cash payments, such as annual bonuses or long-term cash-for-performance schemes. The December 2017 Tax Cuts and Jobs Act eliminated the ability of firms to deduct compensation in excess of $1 million paid to their top five executives regardless of the form of pay and, hence, made this distinction futile. *See* 26 I.R.C. § 162(m).

during a fiscal year. This creates large distortions in the value of equity compensation reported in company disclosures.[167] The accounting and SEC rules governing cash compensation reporting, however, require disclosure of amounts actually earned and pocketed by the executive during the fiscal year. Such cash amounts also appear in the executive's W-2 form for the same period.

Consider a firm that awards an executive 100 performance shares in 2010, which will be paid to the executive if the target performance criteria are met in 2013. The stock price in 2010 is $1 and is expected to increase to $2 in 2013 if the performance target is achieved. According to ASC 718, the firm will report a $100 expense in 2010 regardless of the actual outcome in 2013. But if, in 2010, the firm makes the commitment to award the executive $200 in 2013 provided that the performance target is achieved, the firm will not report any expense in 2010. Instead, it will report a $200 expense only in 2013 and only if the performance criteria are achieved.

Second, the reporting of executive stock option compensation turns out to be not only conceptually different from that of cash compensation but also more prone to firms' subjective assessments. This is because the grant-date fair value of stock options—those options that typically are granted as unvested, non-exercisable, and nontransferable—must rely on complex models and assumptions. The Black-Scholes-Merton formula, which is used most often to estimate the fair value of such stock options, is restricted to assuming single estimates of expected term, expected volatility, risk-free interest rate, and expected dividends.[168] Such rigid assumptions do not necessarily represent the reality of executive stock options well.[169] Moreover, ASC 718 requires the model used to make

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[167] *See* Carr Bettis et al., Performance-Vesting Provisions in Executive Compensation (Sep. 20, 2016) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2289566 (reporting that the mean (median) performance vested grant value disclosed in proxy statements is 30% (79%) higher than their simulated economic value).

[168] Jean Folger, *Options Pricing: Black-Scholes Model*, INVESTOPEDIA (last updated Aug. 15, 2018), https://www.investopedia.com/university/options-pricing/black-scholes-model.asp.

[169] *See* Finn. Acct. Standards Bd., Acct. Standards Update No. 2014-12, Compensation – Stock Compensation (Topic 718): Accounting for Share-based Payments When the Terms of an Award Provide That A Performance Target could be achieved after the requisite service period, a consensus of the FASB Emerging Task Force 1 (June 2014) (recognizing these shortcomings, does not prescribe the use of a specific option-pricing model).

nontrivial assumptions, which render such valuation even more speculative.[170] This flexibility in the disclosure rules covering stock options enables firms to underreport equity compensation, thereby distorting their choice of pay.

Third, the two accounting approaches used to estimate the grant-date fair value of performance shares encourage undervaluation and underreporting of these equity awards.[171] One method, which applies to share price–based performance hurdles, requires the use of an appropriate model, such as a Monte Carlo simulation.[172] Similar to the problem with expensing stock options, this method grants firms vast discretion to use estimates of share price volatility, interest rates, and expected dividends. The other method, which administers accounting-based performance criteria, simply takes for grant-date fair value the share price prevailing on the grant date multiplied by the number of shares that are most probable to vest (usually the number of shares promised for achieving "target" performance). This method, however, carries with it two potential downward biases. First, an expense is updated if, later on, the number of shares that are most probable to vest changes,[173] but no adjustment is made for changes in the share price. Consequently, the positive gap between realized executive income and reported expense is larger for performance that exceeds target criteria than the negative gap for performance that falls below target criteria.[174] Second, both on the grant date and between the grant and vesting dates, firms have tremendous discretion in determining the number of shares probable to vest, creating an even further bias in the reporting of equity pay.[175]

Fixing the downward bias of equity pay disclosure compared to cash pay disclosure is important because (1) investors and regulators will receive a more accurate picture of equity compensation cost, and (2)

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[170] Such assumptions include the expected term of the option, taking into account not only the contractual term of the option but also the effects of the executive's expected exercise and expected post-vesting termination behavior; the expected volatility of the price of the underlying share; the expected dividends on the underlying share; and the risk-free interest rate(s) for the expected term of the option.

[171] *See* David Walker, *The Way We Pay Now: Understanding and Evaluating Performance-Based Executive Pay*, 1 J. L. FIN. & ACC. 395, 429-39 (2017).

[172] ASC 718-10-30-14.

[173] If an equity award combines both market-based and accounting-based criteria, a special treatment that combines the two methods will apply. *See* ASC 718-20-55-61, through 67.

[174] *See* Walker, *supra* note 170, at 429-31.

[175] *See* Walker, *supra* note 170, at 432.

favorable accounting for equity plans skews a firm's choice of equity pay schemes over more efficient cash-for-performance plans. Placing performance-based equity and cash accounting on a level playing field would assist in preventing this distortion.

Revising the rules to eliminate the disparities in accounting and disclosure between equity and cash instruments is doable. For example, accounting and disclosure rules can stop relying on *ex ante* valuation of equity pay and adopt a realized pay approach for both equity and cash instruments. Alternatively, they can apply a mark-to-market approach for determining the annual expense associated with long-term incentives of both equity and cash.[176]

c. Erroneous Perceptions

For firms to objectively consider adopting cash-for-performance schemes, they should free themselves of the misperception that the cost of equity compensation is lower than the actual economic cost of such grants. Owing to their "tangible bias" and mental accounting,[177] combined with the cash-flow, accounting, and reporting considerations mentioned in the previous section, companies routinely but erroneously treat equity pay as a relatively inexpensive way to convey compensation.[178] Instead of grant-date fair value or any market evaluation of equity compensation, many boards perceive the primary cost of equity pay to be merely the "shareholder dilution cost," which can be mitigated through stock repurchase programs.[179]

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[176] A mark-to-market approach refers to accounting for the "fair value" of accounts that can change over time and aims to provide a realistic appraisal of that account. Linda M. Beale, *Book-Tax Conformity and the Corporate Tax Shelter Debate: Assessing the Proposed Section 475 Mark-to-Market Safe Harbor*, 24 VA. TAX REV. 301, 393 (2004). As market conditions change, the account value is updated according to the new market price or another objectively assessed fair value. *Id.*

[177] Mental accounting is the tendency to value some dollars differently from others, depending on the source of those dollars and how they will be spent. *See* Richard Thaler, *Mental Accounting and Consumer Choice,* 4 MARK. SCI. 199, 199–201 (1985).

[178] *See* Kevin Murphy, *Explaining Executive Compensation: Managerial Power versus the Perceived Cost of Stock Options,* 69 U. CHI. L. REV. 847, 858–60 (2002).

[179] *See* Kathleen M. Kahle, *When a Buyback Isn't a Buyback: Open Market Repurchases and Employee Options,* 63 J. FIN. ECON. 235, 240–41 (2002).

Compounding this concern is the fact that most equity pay is granted not to top executives but instead to employees below the top tier,[180] whose individual ability to affect stock price is negligible. This therefore indicates that firms are motivated to pay in equity not because of optimal contracting considerations but because they misperceive that equity pay is relatively low cost compared to cash. Boards should be aware of this misperception and strive to correct it.

F. Leading Firms Already Adopt Cash-for-Performance Plans

I surveyed the cash-for-performance schemes of all firms included in the S&P 100 index as of January 1, 2018,[181] by obtaining data from the "Compensation Discussion and Analysis" chapters in their proxy statements posted on the SEC website, and I analyzed these policies as they apply to the leader of the executive team (the CEO). I focus on CEOs because they are typically the most powerful figures within the executive team, capturing the highest pay slice and having the strongest impact on the value, performance, and behavior of the public firm.[182]

I find that, despite the nontrivial challenges previously analyzed in this section, eighteen prominent firms included in the S&P 100 index—for example, Nike, American Express, Lockheed Martin, and Medtronic[183]—already reward their executives for long-term performance, usually measured over three years, in cash. These firms belong to a wide variety of industries in the fields of health care, aerospace, services, consumer goods, and finance.

My findings indicate that cash-for-performance schemes play a significant role in the overall mix of long-term incentive plans of firms that adopt them. Specifically, the mean (median) weight that firms dedicate to long-term cash incentives is no less than 32% (40%) of their

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[180] *See* Murphy, *supra* note 177, at 857–58.

[181] The S&P 100 is a subset of the S&P 500 and comprises 102 leading U.S. stocks with exchange-listed options. Its constituents are selected for sector balance and represent about 63% of the market capitalization of the S&P 500 and almost 51% of the market capitalization of the U.S. equity markets as of January 2017. The stocks in the S&P 100 tend to be the largest and most established companies in the S&P 500. *See* S&P 100, Fact Sheet, SPINDICES (May 31, 2018), https://us.spindices.com/indices/equity/sp-100

[182] *See generally* Lucian A. Bebchuk et al., *CEO Centrality,* 13701 NAT'L BUREAU ECON. RESEARCH 1 (2007), http://www.nber.org/papers/w13701.

[183] The other firms are AT&T, Johnson & Johnson, United Health Group, Boeing, CVS Caremark, FedEx, General Electric, McDonald's, PepsiCo, Halliburton, Altria Group, Caterpillar, Celgene, and Honeywell.

total long-term incentives. Moreover, cash-for-performance schemes employ unique performance measures that are atypical for equity plans; that is, they universally use *financial* performance metrics as opposed to *stock price–based* performance metrics. The financial measures surveyed mostly include earnings per share, return on invested capital, and revenue growth.[184] Firms explicitly recognize that such financial measures are important because, unlike with equity pay, they are not influenced by variability in the stock market,[185] and hence they strike a desirable balance of internal and market-based measures to assess long-term performance.[186] Moreover, firms indicate that paying in cash in lieu of equity prevents shareholder dilution.[187]

However, firms that introduce cash-for-performance arrangements generally implement them in ways that are not expected to generate the important benefits explained in this article. First, instead of saving shareholders money by offering executives reduced pay for a better form of compensation (cash), they seem to inflate CEO pay.[188] In particular, not a single firm discloses that it adopts a nonequity long-term incentive plan at the expense of either another plan or of sums allocated to other pay components. Consequently, total CEO pay tends to rise in firms that have adopted these policies.

Second, five of the eighteen firms that currently have nonequity long-term incentive plans do not necessarily pay awards in cash. Three of them pay in either cash or stock at the compensation committee's discretion, and the other two pay half in cash and half in stock. Unfortunately, making cash payments only optional or partial misses the opportunity to make a full trade-off between a more desirable pay vehicle for the executive, on the one hand, and a reduced cost for the shareholders, on the other hand.

Third, firms cite the wrong reason for adopting cash-for-performance plans. Specifically, they commonly justify having nonequity long-term plans solely by the desire to diversify their equity pay market-based performance criteria with financial or operational measures. However, they can diversify those performance criteria by adding them to

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[184] In addition to the financial measures, one-third of surveyed firms (six companies) use a stock price–based measure: relative total shareholder return.

[185] *See, e.g.*, Medtronic Inc., Proxy Statement (Form DEF 14A) 43 (Aug. 28, 2017).

[186] *See, e.g.*, Lockheed Martin Inc., Proxy Statement (Form DEF 14A) 39 (Mar. 17, 2017).

[187] *See, e.g.*, PepsiCo Inc., Proxy Statement (Form DEF 14A) 45 (Mar. 17, 2017).

[188] *See supra* Part III. A.

their existing equity plans; there is no need to create plans that pay in cash just for that reason. Unfortunately, by relying on this justification alone, firms ignore the incentive improvements and cost-cutting benefits that long-term cash incentive plans are expected to generate.

It may be that because firms currently abuse long-term cash-for-performance arrangements to increase agency costs, shareholders are pushing to cancel those arrangements. Specifically, I find that, in light of such shareowner feedback, no less than one-third of firms that currently pay in cash for long-term performance, including Johnson & Johnson, McDonald's, and CVS Caremark, have announced that they will stop this practice.[189]

This result, however, is a pyrrhic victory for shareholders. Instead of pushing back on long-term cash-for-performance arrangements, shareholders should pressure firms to reform such arrangements in line with the reform suggested in this Article, thereby reducing total executive pay and improving executive incentives. Unfortunately, such value-increasing arrangements are currently as rare as hens' teeth.

IV. POTENTIAL OBJECTIONS

This Part considers and responds to three possible challenges to paying executives in cash rather than equity for long-term performance.

A. The Reform Would Leave Firms Cash Constrained

Critics might argue that paying executives in cash in lieu of equity would make firms cash constrained. Firms should maintain liquidity, the argument goes, for acquisitions and investments and to shore up their financial reserves for a rainy day.

This argument, however, has no solid foundations. First, the cash amounts that firms would have to pay in lieu of executive equity plans are not likely to be significant. For the 2,200 public companies that report their data to ISS, the total average compensation paid to CEOs is currently

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[189] *See* Anne Fisher, *Why Performance Bonuses and Merit Raises Don't Work*, FORTUNE (Feb. 24, 2016), http://fortune.com/2016/02/24/salary-bonuses-merit-raises-effectiveness/.

0.32% of revenue.[190] Putting this in perspective, cash spent by S&P 500 firms for share buybacks is currently $115.6 billion a year, or 66% of their net income.[191]

Second, many firms, such as Apple, Microsoft, Alphabet, Cisco, and Oracle, are fantastically wealthy, sitting on cash hoards of more than $50 billion.[192] Much of this cash is held overseas, but the 2017 Tax Cuts and Jobs Act reform has created a cash repatriation holiday, allowing those companies to bring those tens of billions of dollars back into the United States under a lower rate.[193] These firms commonly use their excess cash to buy back stock,[194] but this creates suspicion among their shareholders that the firms have nothing better to do with that cash or that they use it in this way only for the sake of financial engineering. At the same time, when firms avoid spending their excess money and keep it on their balance sheets, they become a target for activists. This happens because having too much cash on hand is expected to increase managerial agency costs—the agency costs of free cash flows,[195] which are created when managers use such cash to increase their own salaries or perks, to invest in projects below the cost of capital, or to waste it on organization inefficiencies. Clearly, using excess cash to pay for long-term performance and thereby reduce executive compensation and improve executive incentives would be a far better strategy.

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[190] *See Here's a Disturbing Way to Gauge How Overpaid Some CEOs Are,* AOL FINANCE (June 27, 2014), https://www.aol.com/article/finance/2014/06/27/overpaid-ceos-executive-compensation-vs-revenue/20920130/.

[191] *See* Wolf Richter, *S&P 500 Earnings Stuck At 2011 Levels, Stocks Up 87% Since*, SEEKING ALPHA (Feb. 21, 2017), https://seekingalpha.com/article/4047700-s-and-p-500-earnings-stuck-2011-levels-stocks-87-percent-since.

[192] *See* Andrew Chang et al., *U.S. Corporate Cash Reaches $1.9 Trillion But Rising Debt and Tax Reform Pose Risk,* S&P GLOBAL RATINGS (May 25, 2017), https://www.spglobal.com/our-insights/US-Corporate-Cash-Reaches-19-Trillion-But-Rising-Debt-and-Tax-Reform-Pose-Risk.html.

[193] *See US Tax Reform: Key Business Impacts, Illustrated with Charts and Transactional Diagrams,* CLIENT ALERT (Latham & Watkins Tax Prac.) (Jan. 13, 2018), https://m.lw.com/thoughtLeadership/US-tax-reform-key-business-impacts-charts-transactional-diagrams.

[194] Despite the plunge in buybacks, 119 companies included in the S&P 500 index spent more on buybacks than they had earned in the quarter. *See* Richter, *supra* note 190.

[195] *See* Michael C. Jensen, *Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers*, 76 AM. ECON. REV. 323 (1986).

B. The Reform Would Reduce Executives' Incentives

Critics may argue that cash-for-performance plans would weaken executives' incentives because, unlike with equity plans, executives would no longer be motivated to maximize shareholder value after they received their awards. This, however, is not a well-founded argument.

First, the arrangement would maintain their incentives by providing optimal rewards not only before the grant date, as earlier explained,[196] but also thereafter. This would be accomplished in two major ways. The first way would be to grant time-based, long-term equity. As explained in Part III.C.1, time-based equity plans would complement cash-for-performance plans by providing stable, long-term equity awards that, unlike current equity grants, would maintain a general incentive to maximize stock price. The second way would be to adjust performance criteria sensitivity to awards for plans for which the measurement period is still ongoing. Take, for example, an executive who is otherwise promised to receive $50, $100, and $150 for meeting minimum, target, and maximum performance, respectively. If plan designers wish to increase the executive's overall degree of value-promoting incentive, they can change the respective awards to, say, $10, $100, $200 and thereby increase pay-performance sensitivity.

Second, not only would awards after the grant date not be reduced but they would also be more accurate, deliberate, and productive. Because equity plans never dictate the time at which grants should be unloaded, the strength of incentives they provide *ex-ante* is unknown. With cash-for-performance plans, however, this amount is transparent and, hence, can be fine-tuned to optimal levels. Also, the arrangement would eliminate the perverse incentives to destroy firm value that equity compensation provides.

C. Panglossian Claims

Finally, no discussion of a corporate governance reform can conclude without addressing the "Panglossian argument," which argues that markets are efficient and that existing arrangements are therefore the best of all possible worlds.[197] If a given arrangement were value

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[196] *See supra* Part III.A.

[197] *See generally* Stephen J. Gould & Richard C. Lewontin, *The Spandrels of San Marco and the Panglossian Paradigm; A Critique of the Adaptionist Programme,* PROC. ROYAL SOC'Y.

increasing, the parties involved would have already embraced it because they would benefit from it.[198] Thus, if the proposed arrangement were efficient, firms would have already implemented it voluntarily.

The analysis in this Article shows, however, that this argument is weak in the case of the reform under consideration. Three market participant groups could be potential advocates for reforming equity pay and adopting cash-for-performance: corporate executives, investors, and proxy advisory firms.

Corporate executives, as explained in Part III.E.1, are not expected to support a long-term cash-for-performance plan along the lines proposed in this Article. They did, however, manage to improve their salaries by successfully pushing prominent firms to adopt self-serving cash-for-performance plans.

Shareholders and their advisors—proxy advisory firms and compensation consultants—have been constantly pushing firms to reform equity compensation. They managed, for example, to convince firms to abruptly shift from stock options to restricted stock compensation in the 2000s and to reduce time-based equity for performance-based equity.[199] Other reforms involved stock ownership policies and clawbacks of equity compensation. Shareholders, however, have not sought to institute long-term cash-for-performance plans and have even pressured firms that already had such plans to cancel them.

I argue that agency costs, not economic undesirability, are what deter shareholders from exhorting firms to adopt cash-for-performance arrangements. As I have already noted, shareholders have good reason to be afraid that firms would exploit long-term cash-for-performance awards to increase managerial agency costs, given that some firms have already done exactly that.[200] In addition, institutional investors might not push for adoption of long-term cash-for-performance plans because of their agency

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LONDON 581, 585 (1979) (describing Pangloss, a naïve optimistic philosopher from Voltaire's parody of Gottfried W. von Leibniz in his 1759 satire *Candide,* who claims that our world is the best of all possible worlds).

[198] This notion is similar to the idea of Coasian bargaining, according to which individuals may be able to solve the problem of externalities through negotiation, without involving a government. *See* Ronald Coase, *The Problem of Social Cost*, 3 J.L. & ECON., 1 (1960).

[199] *See supra* Part A.1.

[200] *See supra* Part III.F.

problems with their own beneficiaries. In particular, they might find it challenging to convince their beneficiaries that awarding additional cash compensation to their executives serves shareholder interest even if it would improve executives' incentives and reduce costs; this is because they are unsophisticated investors who are not savvy enough to make the rational deliberation offered herein. And because of their lack of sophistication they are likely to be heavily influenced by the significant cognitive biases explained in this article.

CONCLUSION

This paper has reconsidered the desirability of using stock and stock options to constitute the lion's share of U.S. executive compensation, a practice that has profound implications for the incentives that executives have and the remuneration costs that shareholders incur.

Against the background of intense rhetoric criticizing pay arrangements that were hardly sensitive to performance, equity compensation arrangements were widely adopted in the 1990s and were welcomed as a high-powered tool to incentivize managers to maximize stock price and improve performance. But the market meltdowns of the early 2000s and 2008–2009 sparked outrage at the inflated equity compensation arrangements that ended up benefiting corporate executives at the expense of their shareholders. The analysis in this Article has connected that populist fury to a systematic academic investigation about the inherent flaw in equity pay: their inadequacy as both a performance measure and a form of compensation.

In particular, I have discussed how stock price is too inadequate an estimator of firm fundamentals and managerial performance to serve as the basis for managerial rewards. In fact, the connection between change in stock price and managers' performance is so obscure that, in the aftermath of "say on pay," most firms stopped using their stock price in this capacity. Moreover, I have shown that equity is an inherently flawed form of pay, as the freedom of corporate executives to sell or hedge their equity compensation not only reduces their incentives to create value for the firm but also provides them with perverse incentives to destroy shareholder value. And my analysis has demonstrated that the inherent inefficiencies of equity pay, amplified by cognitive biases and agency costs, have played a major role in the unprecedented explosion of executive compensation.

While firms have addressed the inadequacy of equity to assess managerial performance by largely eliminating stock price as a performance criterion, and while academics have sought to reduce the significant costs inherent in using equity as a form of pay by suggesting proposals to limit stock unwinding, the reform suggested by this Article has attended to both problems. It has suggested paying executives in cash for attaining predetermined performance criteria. Specifically, it has offered two variants: PCA plans, which would pay fixed cash amounts, and PPS plans, which would prescribe cash equivalents for predetermined stock amounts. My analysis has shown that both variants would eliminate the perverse incentives of equity pay and replace them with effective and transparent incentives to increase firm value. Moreover, by addressing the inefficiencies of equity pay head-on, the reform should turn around the ever-increasing explosion of executive compensation that equity pay has created.

This paper, I hope, will contribute to the ongoing discussions on improving executive compensation. Paying executives in cash for long-term performance in line with my proposed arrangement would benefit shareholders and do much to revamp executive pay arrangements.

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